

Chemist & Druggist

December 8 1973

THE NEWSWEEKLY FOR PHARMACY

**Wholesalers
and Saturday
deliveries**

**Therapeutic
advances 1973**

**A future for
the industrial
pharmacist**




**Beatson tablets
always fit for service**

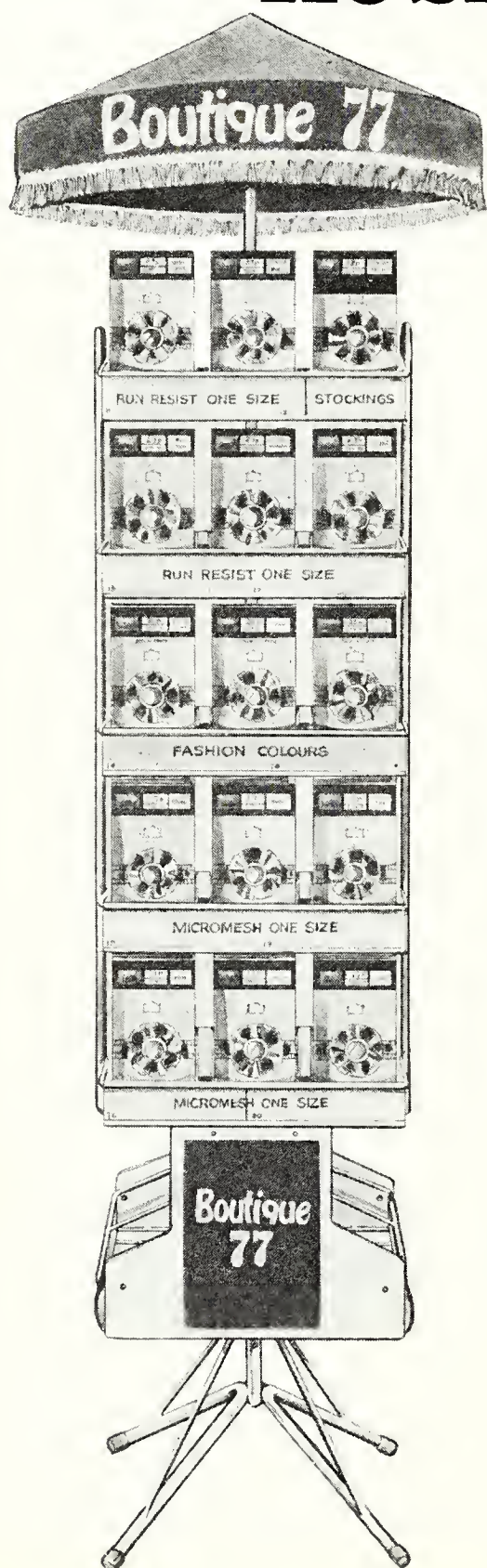
Beatson tablets are made of glass, because glass contains
without reacting.
made and tested to the highest standards you can rely on
Beatson tablets — always.
available in white flint and amber.



BEATSON, CLARK & CO. LTD.,
Rotherham, Yorkshire. Tel: 0709 79141 Telex: 54329

BCD241/2 

For a couple of feet of floor space, you can have a share of the £140 million hosiery market.



Why should a chemist stock tights?

- Because the hosiery market is worth more than twice the combined sales of toothpaste, plus hairspray plus shampoo—it's a £140 million retail market.
- Because 100% of women buy hosiery—yet only a minority buy from a chemist.
- Because the atmosphere of a chemist's is particularly suited to the unhurried, browsing-through purchasing pattern of hosiery buyers.

Why Boutique 77?

- Because the Boutique 77 Range has something to offer every potential purchaser. A big variety of different colours, fittings, prices and styles. Normally, only a big retail store would be able to offer a range of this size.
- Because the attractive, well-designed Boutique 77 display only takes up two square feet of floor space. And none of your time.
- Because all the problems are looked after by Boutique 77, merchandising, stocking and re-stocking.

How can it happen?

Simply by contacting Boutique 77, and letting us show you our ranges and display stand in more detail.

Boutique 77

Boutique 77 Ltd.
Raans Road, Amersham, Bucks.
Tel: Amersham 21321.

8 December Vol. 200 No. 4890

The newswweekly for pharmacy
115th year of publication

Contents

Editor Arthur Wright, FPS, DBA
Deputy Editor R. E. Salmon, MPS
Markets Editor W. S. Bowman, MPS, MIPharmM
Technical Editors Adrienne de Mont, B Pharm, MPS
J. F. Preece, BSc, MPS
Information Service I. H. Cotgrove
Price List Mary Mackintosh
Advertisement Manager James Lear
Advertisement Executives
Foster-Firth, MPS
John Thelwell
Production G. Jenner
Contents ©

Benn »

Official organ of the Pharmaceutical Society of
England and of the Pharmaceutical Society of
Northern Ireland

Member Audit Bureau of Circulations

Comment □ A plea for service	789
Petrol shortage hits wholesalers	790
US pharmacists to launch "intelligence" campaign	790
Wrong price cards lead to fines	791
Healthy cosmetics sales forecast up to 1978	792
The Xrayser column: Price-cutting	793
Therapeutic advances in 1973	802
Pyrogen free water seminar	803
BPC amendments	804
A future for the pharmacist in industry	806
Liquidity crisis for a Weston shareholder	807

Coming Events	808	News in Brief	793
Company News	807	On TV Next Week	800
Deaths	793	Postscripts	789
Equipment	801	Prescription Specialities	801
Letters	806	Trade News	796
Market News	808	Westminster Report	803
New Products	801	Classified Advertisements	809

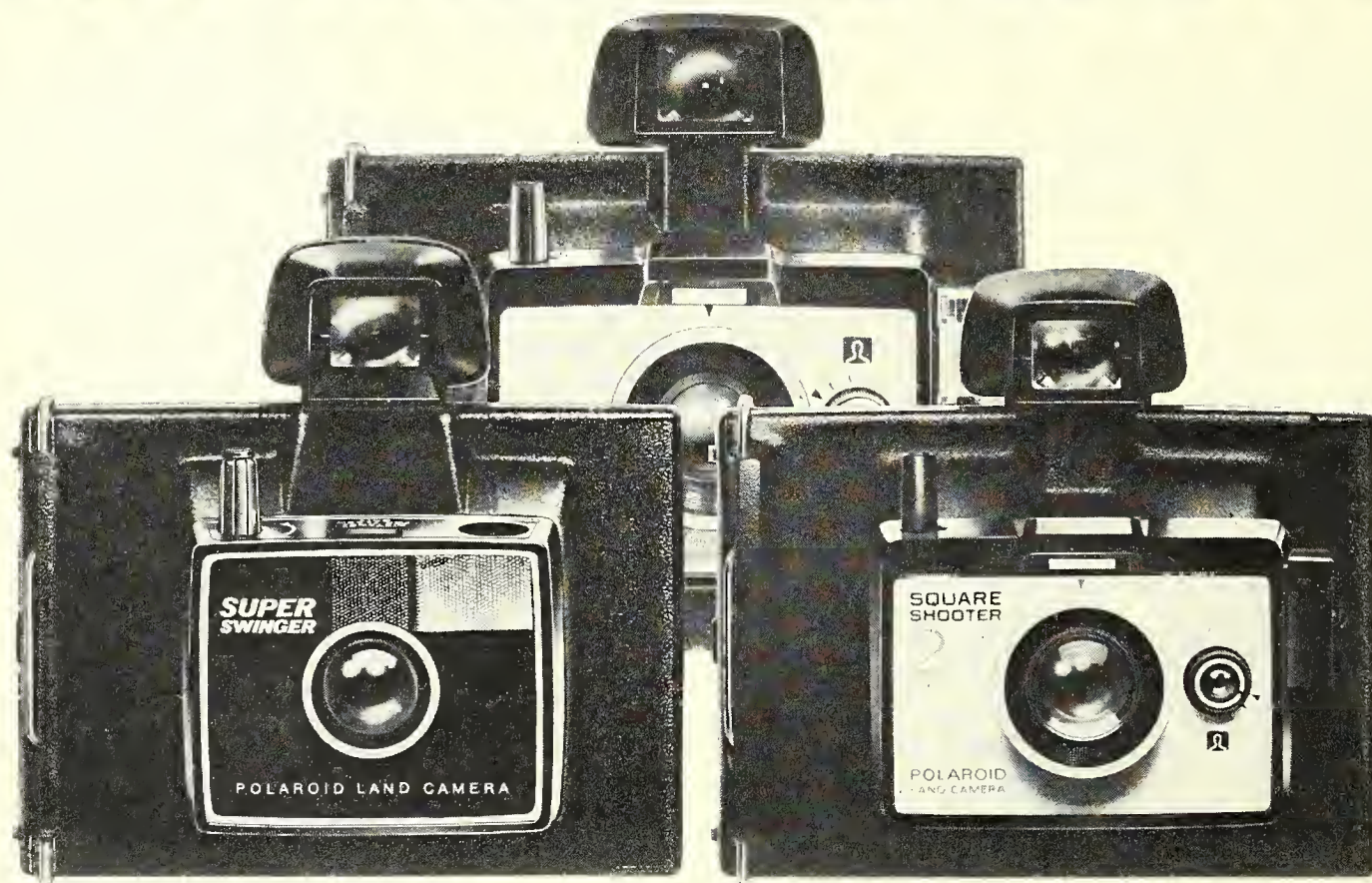


S. M. Peretz says the pharmacist
has a "head start" in industry (see p 806)

Published Saturdays by Benn Brothers Ltd
25 New Street Square, London EC4A 3JA
Editorial and Advertisement Offices
25 New Street Square, London EC4A 3JA (01-353 3212) Telex 27844
Regional Advertisement Offices
Midlands: 240-244 Stratford Rd, Shirley, Solihull, Warwicks
021-744 4427
North East: Permanent House, The Headrow, Leeds LS1 8DF
0532 22841
Scottish: 74 Drymen Rd, Bearsden, Glasgow 041-942 2315
North West: 491 Chester Rd, Old Trafford, Manchester M16 9HF
061-872 5151
West Country and South Wales: 10 Badminton Rd, Downend,
Bristol BS16 6BQ—0272 564827

Subscription Department: Lyon Tower, 125 High Street, Colliers Wood,
London SW19. Telephone 01-542 8575. **Subscription:** Home and
Overseas £10 per annum 30p per copy (including postage)

Make money by the minute, or the half minute.



Polaroid's instant moneymakers

We know that Polaroid instant picture cameras will be in great demand this Christmas, and we're ready to meet your demand for them. We've ample stocks of **Super Swingers** — for black and white in seconds — £6.96*, **Square Shooter 2's** — for colour pictures in a minute — £12.36*, and **Colorpack 80's** — for both instant

colour and black and white pictures — £16.18*. Remember too we can supply all your Polaroid film requirements.

 **Vestric Ltd**

Contact your Vestric Representative or Branch now!

Comment

A plea for service

The inadequacy of weekend "ethicals" services currently provided by wholesalers has forced a High Wycombe, Bucks, pharmacist to offer the bulk of his account to the wholesaler willing to accept orders and deliver on Saturday mornings.

Mr J. Williams, of the Victoria Pharmacy—whose advertisement appears on p 800 of this issue—explained to *C&D*: "It is ridiculous to have to tell customers at 5 pm on a Friday evening that we cannot obtain a medicine until Monday. One wholesaler rings from Oxford at 4 pm on Friday and delivers 9 am Saturday, but we may do several hundred items between 5 pm and 8 pm on a Friday evening." Three other wholesalers deliver in the area Saturdays, but again do not accept orders on that day. The Victoria Pharmacy is "professional only" and Mr Williams states that his wholesaler-accounts for NHS items alone are worth over £60,000 annually. He believes that the kind of minimum order he is willing to guarantee for the Saturday should make providing the service attractive to a wholesaler, especially since other pharmacies in the area could be served by the same van.

Of course, the wholesalers' problems can be appreciated. They must employ trustworthy and conscientious van-drivers, and such people can find creative employment without working on Saturdays, particularly around the larger conurbations. They must also bring in skilled order and dispatch staff, perhaps at overtime rates.

More and more pharmacies are having to rely on part-time labour to cover the working hours of the Executive Council's contract. In wholesaling the same

situation has arisen and the competition, coupled with attacks on margins, has caused the service to be contracted and no longer can a retailer reasonably expect to receive multiple deliveries daily. Nevertheless, the public, when it turns from being employed to being a consumer, expects service on demand and nowhere is that highlighted more than over the dispensing counter.

The wholesalers may ask, legitimately, how much of Mr William's promised Saturday order might have been placed on Monday to Friday if there is no weekend delivery. His answer is that it would be minimal, because of his shortage of storage space.

But these are problems the wholesaling fraternity must be prepared to overcome. With Saturday afternoon surgeries almost a thing of the past, Friday evening can be busy—and it is no good telling the patient to stay ill until Monday, even if she has only run out of her "usuals"!

It is all part and parcel of the pharmacist's claim to sole dispensing rights, which stands up only so long as the profession is able to deliver "the right medicine at the right time".

General practice pharmacy is required by the NHS to go a long way to achieving that goal through the rota system which, before the days of "rota breaking", enabled an economic service to be offered by one pharmacy where several might have opened unprofitably, or none at all.

Is there no way in which the pharmaceutical wholesalers could adapt this principle to the needs of their customers—and, more importantly, to the needs of the patients they indirectly serve?

Post Scripts

Medical advertising

How far can pharmaceutical advertising go and still remain "ethical"? Indeed, what is "ethical" in this context? These questions came up for debate last weekend at the British Pharmaceutical Student's Association's southern regional conference (see p 806), and it is perhaps fortunate that no *Guardian* reader was among the audience. What, we wonder, would the students have made of Sterling Health's gold-wrapped Hedex Seltzer carton (plus, of course) offered in the "Christmas presents" column?

"Treat yourself this Christmas", the order is advised. "It's all starting. The party, the neighbour's party. Aunt's party and, because you know you're going to overdo it again, your

murderous morning-afters. . . ." For those who didn't get the message, the *Sunday Observer's* Christmas gift guide offered "A Boxing Day gift — for the man who has everything".

Yes, Hedex Seltzer! "Miserable head, churning tummy, furry tongue — Dad's Christmas morning-after. Look after him with new Hedex Seltzer. . . . Be prepared. Get Hedex Seltzer for his stocking".

When explaining their new "Family medicines you can trust" campaign earlier this year (Supplement to *C&D*, January 20), Sterling Health said that "with pharmacist's co-operation . . . advertisements in the future will proclaim that Sterling Health's products are 'all at your chemist'".

The latest advertisements omit this piece of information — though in "Sarah Seaton's" column in last week's *Woman*, Hedex Seltzer is said to be "available from most chemists and supermarkets". Perhaps pharmacists' "co-operation" has not been all it might. And perhaps there could be a reason!

A "cure" for smuggling?

Police and border guards are attempting to curb smuggling across the Kashmir control line, and according to a recent Press report, a number of smugglers have been arrested. The most interesting item discovered being smuggled in to Indian Kashmir was live leeches. The discovery was made when a leech fell from the bag of a smuggler and bit a policeman!

Regular stamping ground?

One doctor who may be inconvenienced by the shortage of Valium tablets (see p 791) is the "writer" of the prescription illustrated below. The London pharmacist who received it could not decide whether the rubber stamp was in the interests of "clarity" or frequency of prescribing!

TABS VALIUM

5 mgm.

60 AS ADVISED

Petrol shortage hits wholesalers

The petrol shortage is hitting pharmaceutical wholesalers throughout the country—Mr E. R. Leaver, secretary of the National Association of Pharmaceutical Distributors, described the situation on Wednesday as "very serious" and warned that unless it is rectified quickly, chemists can expect some reduction in service.

A Coventry wholesaler, Wyles Ltd, had been out of fuel for a week, but a tanker was delivering as *C & D* talked to Mr E. A. Mitchell about the problem. The delivery came after he had received headline publicity in the local Press on Tuesday evening, but up to that point van drivers had had to be told to find what petrol they could. Mr Mitchell said that their suppliers Shell, had notified a reduction of over a third on normal supplies for the six weeks from November 21—that was despite the publicised "10 per cent cut overall and no cut for priority users".

A major factor in creating this situation was the failure of the government to include wholesalers in the initial priority list—and even inclusion would not directly help wholesalers without their own storage tanks.

Any wholesaler in difficulty is advised to contact his regional Department of Trade office which may arrange a supply from an oil company.

'Pharmacist's intelligence' theme of US campaign

"Over-the-COUNTER INTELLIGENCE . . . Your pharmacist has it" will be the theme of the public relations programme to be conducted in the US next year by the American Pharmaceutical Association.

Drawing the public's attention to the pharmacist as their counsellor on non-prescription drugs, the theme advises: "Before you select non-prescription drugs, consult your pharmacist".

The launch date will be during National Pharmacy Week, January 20-26 — rescheduled from its normal October position to introduce the campaign. APhA will make available to pharmacists and their organisations a number of PR materials to be used during the Pharmacy Week and in subsequent months. These include a display poster, counter card, bumper sticker and package stuffer.

Public relations firm, Henry J. Kaufman & Associates, Inc, will send a newspaper clipsheet to thousands of large city and small town newspapers, and television film clips to stations throughout the country. Later during the year-long programme, Kaufman will release a motion picture for pharmacists' viewing, and taped radio spots and a television featurette for public airing.

The APhA has also planned an extensive

programme of activities relating to over-the-counter drugs.

According to a recent APhA Newsletter, the OTC project would increase the profession's knowledge with regard to OTC drugs; communicate with the public regarding those drug products; co-ordinate APhA liaison with the Food and Drug Administration and other governmental agencies with regard to OTC drugs; and serve as an advertising "watchdog". Specific activities to be undertaken would include publication of a consumer-orientated handbook on non-prescription drugs; monitoring OTC advertising and call possible violations of advertising codes to the attention of the appropriate agencies; and development of a continuing education "package" that would assist pharmacists in their role relative to OTC drugs and help maintain pharmacists' knowledge in the areas of self-diagnosis and self-treatment.

Price advertising

The US Food and Drug Administration has drafted new rules to clarify existing regulations on prescription drug advertising as they affect public disclosure of prices charged by retail pharmacies.

The rules would provide that the advertising of prescription drugs must state all charges to the consumer, including the cost of the drug, professional fees charged by the pharmacist, and any handling and mailing costs. The proposal further spells out mandatory and optional rules providing for the listing of brand as well as generic names, quantity of each active ingredient, name of manufacturer or distributor, dosage form and price according to number of doses in the unit advertised. The policy would extend to all price lists.

Price disclosure, as a part of drug labelling and advertising, has been subject to

FDA regulation since 1962, but the precise requirements have not been widely understood. A number of States have law banning the "posting" (display) of prescription drug prices in retail pharmacies or other advertising of prices, but, since 1962 such bans have been overturned or overpricing has been otherwise upheld by the courts in at least nine States. By January two States will require posting of drug prices in retail pharmacies.

The principal question, according to Dr A. M. Schmidt, FDA Commissioner, is not whether such advertising should be allowed, but how to ensure that, when practised, it would provide consumers with all information needed to make "meaningful price comparisons".

New poison effective against 'super rat'

A poison has been found for use on rats and mice resistant to warfarin.

The poison, Sorex CR, is a mixture of calciferol 0.1 per cent in corn oil and warfarin 0.025 per cent in medium oat meal. The makers, Sorex (London) Ltd, a subsidiary of Ward Blenkinsop Ltd, say the calciferol produces a rise in blood calcium levels causing renal or liver failure. At these levels, rats previously immune to warfarin have been shown to die of haemorrhage.

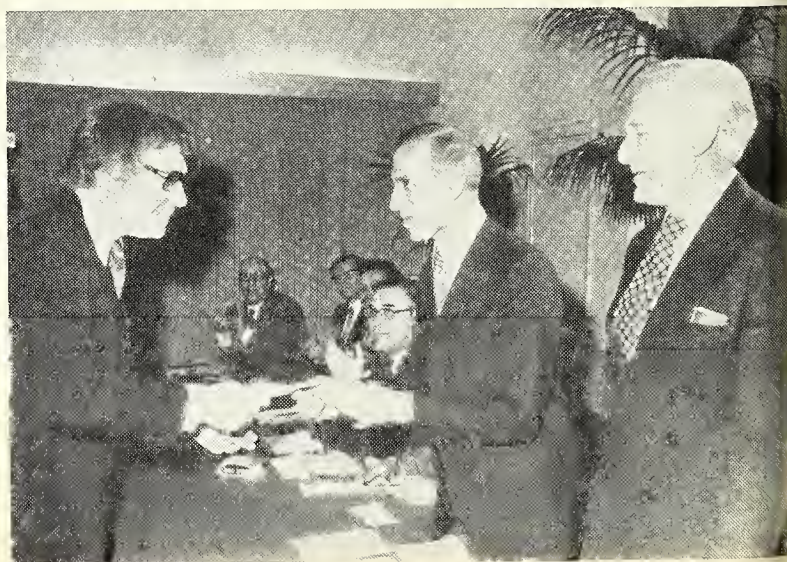
In field trials, the poison gave 100 per cent rat control in four to 14 days during 12 trials on farms infested by rats resistant to warfarin. The success rate was 60-100 per cent in 19 trials on house mice. The tests were carried out on farms in Shropshire and Montgomeryshire where a four-year poison campaign against the "super rat" was abandoned in September 1970.

Sorex CR is available for sale through pharmacies but only to farmers or owners of agricultural or industrial premises.

'Curtains' pharmacy petition

Some 3,000 people have signed a petition to stop the closure of a pharmacy in a Northampton housing suburb. The premises are under a local authority order to be closed as a shop because the owner, Mr C. Richardson, refuses to put up net curtains. Mr Richardson is appealing to the Environmental Minister to overrule the order.

Belgian Minister of Science, Mr C. Hanin (centre) presents to Belgian tv science commentator, Mr P. Danblon a scholarship worth £750 under the Glaxo European science writers awards scheme 1973. The presentations were made in Brussels. On the Minister's left is the British Ambassador, Sir John Beith.



Wrong price cards lead to fines

"Human error" was blamed for two offences of selling denture tablets at a price higher than that stated on a display card when Boots the Chemists Ltd, was fined £20 for two offences under the Trade Descriptions Act at one of their Manchester branches.

The firm pleaded guilty to indicating on a display card that denture tablets were being offered at a price less than that which was in fact sought. Mr J. Barnes, for the company, said there had never been any deliberate intention to mislead the public.

Recently the Carrefour hypermarket at Caerphilly, Glamorgan, was fined a total of £260 on 13 charges of selling items where the shelf-edge price differed from the price on the item. In their defence the store said that the almost daily level of price changes had proved a massive operation and caused a breakdown in the system.

Election of officers for Contractors Committee

Nomination papers for members to be elected to the Central NHS (Chemist Contractors) Committee for April 1, 1974-March 31, 1978 must reach Mallinson House by noon on January 14, 1974.

Voting papers with names of candidates for the region will be sent to the secretary of each Area Chemist Contractors Committee by January 18 and should be returned to Mallinson House by noon on February 9. Results will be announced on or before February 16.

This gives effect to the recommendation of the working party on general pharmaceutical services that part of the Central NHS (Chemist Contractors) Committee should be elected by Area Committees from their chemist contractor members.

Valium shortages

Chemist contractors unable to supply Valium tablets may endorse the form C10 saying that the prescriber's authority has been obtained to dispense another brand of diazepam or an alternative preparation. The Department of Health says payment will be for the preparation supplied by the pharmacist. An endorsement saying "Doctor telephoned . . . supplied/dispensed" will suffice.

Consumer the health-care decision-maker?

There is a "growing independence on the part of the health-care consumer", according to an editorial in the October edition of *Journal of Pharmaceutical Services*.



The voice on the 'phone: Mrs Dorothy Wallcroft, who for the past four years has been at the end of the C&D "inquiries" telephone, retired last week. Joining Morgan Brothers (Publishers) Ltd (the former publishers of C&D) in 1929 she worked in the subscription department until 1969, when she joined C&D's inquiries team. Mrs Wallcroft received a gold watch in recognition for her services from Mr Glanvill Benn, chairman of Benn Brothers Ltd, who have published C&D since 1970. She is pictured here with (left to right) Mr I. Cotgrove, C&D information officer, Mr Glanvill Benn, Mr J. Lear, advertisement manager C&D and Mr Charles Chadwyck-Healey, a director of Morgan-Grampian Ltd.

Such independence is ascribed "to better and more education in the sphere of health problems, to the realisation that the physician is a mere mortal, and to a less definable feeling by persons that they want more control over certain decisions in their lives". Many patterns and generally held beliefs relative to health care are being questioned both internally and externally.

"The old paternalism, which previously sufficed in many situations, is obviously out", continues the article. Old patterns must now be broken — in their place more realistic and relevant approaches to satisfying the public need must be adopted. "Pharmacists, especially with their increasing professional involvement, have a splendid opportunity to start on the right foot by rejecting the position assumed by many medical practitioners." The "do as I say because I know best" posture is slumping and pharmacists "would do well to adopt the basic premise that the consumer is the ultimate decision-maker, even in health care".

On show at Intershop

Intershop 1974, to be held at Olympia, January 13-16, 1974, will have a fully-equipped chemist's shop as one of eight replicas to make up an authentic shopping precinct. Each shop will contain fully-merchandised shelves and will show how attractive, modern equipment can fit in with the individual requirements of the retailer. Showrax Ltd, Tower Works, Northfleet, Kent, will be responsible for building and equipping the precinct.

Visitors should be able to examine and compare the many different types of shelving systems; modular shelving for adaptability and shelf brackets for instant assembly; display stands in many colours, price tickets and in anticipation of less austere times, display lighting and illuminated signboards.

An automated storage and retrieval system specifically designed for the pharmacist, will also be exhibited.

Free invitation tickets for the exhib-

ition can be obtained from Eric Cutler, The National Display Equipment Association, 18 Croydon Road, Caterham, Surrey CR3 6YR.

More in hospital through 'chemical' effects

A 210 per cent rise in patients needing hospitalisation for the adverse effects of chemical substances—including drugs—is recorded in a report published last week.

According to the Report on Hospital In-patient Inquiry 1962 (Preliminary Tables) (HM Stationery Office, £0.34), an estimated total of 105,720 patients in hospitals in England and Wales in the scope of the inquiry were treated for such adverse effects last year.

The inquiry was based on 9.31 per cent sample of total hospital discharges and deaths in England and Wales for 1972. Some 91,390 patients in the survey were treated for adverse effects of medicinal agents with a mean hospital stay of 3.2 days "Analgesics and antipyretics" accounted for 21,600 such cases (mean stay 3.2 days), with sedatives and hypnotics other than anticonvulsants totalling 15,070 (mean stay 3.7 days). Toxic effects of substances chiefly non medicinal as to source were 14,280 (mean stay 2.2 days).

Chemists' sales 13 pc. up

Chemist and photographic retailers' sales for October were up 13 per cent on 1972 against an increase for all kinds of traders of 14 per cent. The Department of Trade's index also shows that independent chemists' figures rose by seven per cent although independent businesses generally improved by 11 per cent.

The index for all chemists now stands at 126 with independent chemists at 119. Figures for multiples are not available and NHS receipts are not included in the calculations.

Healthy cosmetic sales forecast up to 1978

Spending on toiletries and cosmetics in 1972 increased by 19 per cent and is expected to increase by 13 per cent in value this year compared with the previous years according to a report "Toiletries and Cosmetics" produced by James Morrell & Associates, 91 Grays Inn Road, London, WC1.

The report attributes the rise to a strong increase in consumer spending generally (particularly in 1972), and to the relative price advantage in 1973 caused mainly by the substitution of VAT for purchase tax. Morrell's forecast the yearly percentage growth of toilet requisites and cosmetics for the period 1972-78 compared to total consumer spending at:

	Toiletries-cosmetics spending	Total consumer spending
Value	11.8	9.8
Volume	6.7	3.4
Prices	4.8	6.2

The growth has been (and will continue to be) led by cosmetics says the report. The following figures are given for consumer spending:

	1972 £m	% annual growth	1978 £m
Cosmetics	260	14	565
Toilet requisites	130	8½	210
Toilet paper	50	8½	82
Total	440	12	857

'Watchdog' body predicted for perfume industry

The perfume industry is likely to come under as close a scrutiny as the pharmaceutical industry. The formation of a "watchdog" body to check on the toxicity and suitability of fragrance products used in new household products including soaps and toiletries was predicted by Mr Paul Farrow, marketing manager of Proprietary Perfumes Ltd, at a press conference at Ashford, Kent, last week. Manufacturers of toiletries, he said may no longer be prepared to accept just the assurances of the perfume company that a particular fragrance material was safe or would not adversely affect other ingredients in the final product formulation. The rising cost of test marketing or consumer testing new products combined with mounting government pressure on manufacturers' prices and profits was already leading to manufacturers demanding greater assurances that the fragrance they were proposing to test had a reasonable chance of success.

"Increasingly perfumery companies will be asked to reveal, either to manufacturers,

or alternatively to a government agency details of the composition of fragrances backed by independent evaluation of the safety aspects of many of the thousands of raw materials which perfumery companies have available for use", said Mr Farrow.

He added that perfumery companies, too, may well have to face the fact that the profitability which they have enjoyed for so many years will come under severe pressure both internally as a result of the complex raw material cost and supply structures and externally as a result of pressure on customer's selling prices by governments.

"These two factors may well result in a little of the mystique being removed from perfumery and at the same time lead to a better understanding of each side's difficulties," he said.

Executive Council asked to support petrol applications

To ensure "as little delay as possible" in dealing with chemists' application for the business ration of motor fuel, Executive Councils have been advised by the Department of Health that "a counter signature by the Council would be an advantage".

However, the Department do not anticipate that chemists will experience any difficulty in obtaining the business ration. Applications for such ration should be made on form B1, obtainable at post offices, during the three weeks beginning December 13.

The Government's plans also make provision for supplementary allowances on top of the basic and business rations where they would be insufficient in certain circumstances. Such persons could be chemist contractors regularly supplying oxygen, as indicated by the monthly returns, or on the urgent dispensing list (current applicants being included only if existing arrangements are inadequate and the Council is satisfied that the applicant intends to provide a continuing service).

A supplementary allowance would be at the discretion of the regional petroleum officers to whom application should be made if rationing comes into force. The Department of Health have asked Executive Councils "to give appropriate support" to such applications.

Digoxin: 'quality of some brands needs improving'

For the safe use of digoxin the quality of some marketed tablet preparations should be improved, and more careful control—either official or from the manufacturer's side—is needed, according to two Finnish researchers.

In a letter published in last week's

Lancet, V. Manninen and A. Korhonen give the results of their investigations into digoxin content of different brands of tablets by the British Pharmacopoeia assay method. They record "striking differences" between the brands tested: those made by Burroughs Wellcome, Sandoz and Draco conformed with the standard"; Orion, Leiras, Medica and Medipolar brands "were close to acceptable"; but tablets made by Star and a UK generic preparation manufactured by Kerfoot "were well outside the acceptable range."

A spokesman for Thomas Kerfoot & Co Ltd told C&D that the tablets used in the test were manufactured before there were official requirements of uniformity of content and prior to the methodology for such tests being published. All digoxin tablet batches manufactured since February 1973 had been subjected to the test and have complied with the requirements. Kerfoot's manufacturing methods had also been looked at and some changes to further improve uniformity had been introduced. "We are now confident that all tablets comply with the BP for uniformity of content," added the spokesman (see also p 806).

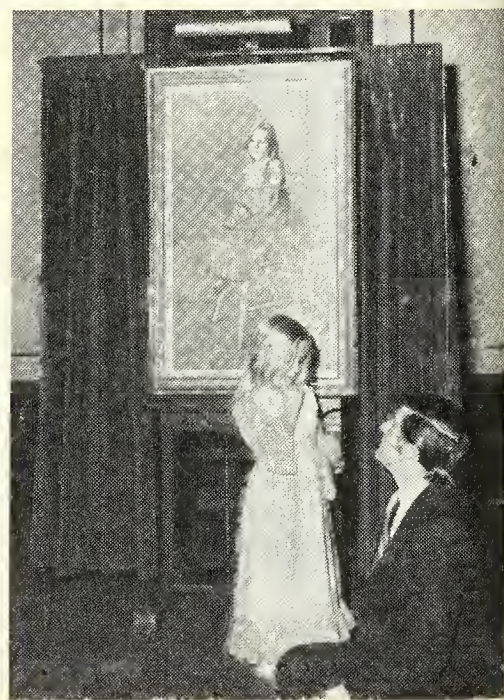
Drug Tariff correction

The first entry under "Two way stretch" on page 10 of the October 1973 Quarterly Amendment to the Drug Tariff (elastic hosiery section) is incorrect. The entry should read "Standard elastic yarn (flatbed knit fully fashioned) hosiery" and not "Standard elastic net hosiery" as printed. The Central NHS (Chemist Contractors) Committee has asked chemists to amend their copies.

Statutory Committee dates

The Pharmaceutical Society's Statutory Committee is to meet at 10.15 am on December 10 and 11 at 17 Bloomsbury Square, London WC1. The hearings will open in public to consider evidence in four new cases and resume inquiries into six cases previously adjourned.

Miss Pears 1973, five year old Natalie Clarke from Loughton, Essex, unveils her portrait at Painters Hall, London. The portrait was painted by Michael Noakes.



News in brief

April 1 has been officially designated the meaning of references to "the appointed day" in provisions of the National Health Service Reorganisation Act 1973 and the Act's Appointed Day Order 1973 (M Stationery Office, 3p).

Mr Robert C. Johnson of California has been elected 1974-75 president of the American Pharmaceutical Association.

During August 20,331,349 prescriptions (899,297 forms) were dispensed in England at a total cost of £1,841,846,928—an average of 90.59p per prescription.

Some 64 per cent of all flash photographs in West Germany are taken with aid of flash cubes, according to a recent report.

"Preparing sterile particle-free fluids in the hospital pharmacy" is the title of a 72 page manual available free from Millipore (UK) Ltd, Millipore House, Abbey Road, Park Royal, London NW10 7SP.

Deaths

Mr James Reynolds Ball, MPS, 68 Rolleston Drive, Notttingham. Mr Ball was a director of P.I.F. Pharmaceuticals Ltd, having qualified in 1907. He was one of the founders of members of Potts' Infants' Friend Ltd later known as P.I.F. Pharmaceuticals Ltd in November 1923. He died on the day of the company's half-century anniversary.

Mr Maurice Martin, a director of Shaws Veterinary Chemists Ltd, Aston Clinton, Bucks, Mr Martin joined Shaws in 1950.

Miss Bridget Frances Meehan, MPSI, Edgeworthstown, co Longford. Miss Meehan had been for almost half a century in practice in Edgeworthstown, retiring a year ago.

Mr Griffith Nugent, MPS, Green Meadow, St Asmaels, Cardigan. Mr Nugent qualified in 1923.

Mr Timothy Joseph Connor, MPSI, 3 O'Connell Avenue, Limerick. For almost 40 years Mr Connor had his own pharmacy in The Crescent, Limerick. He is survived by two daughters, Miss Kathleen O'Connor and Miss Hannah M. Purcell of Clonmel, both of whom are pharmacists.

Mr Leonard Ward Pearce, aged 81. Mr Pearce worked for William Ransom & Son, Ltd for 40 years and was a director for 23 years, retiring in 1968. During his career he saw all four generations of Ransoms, including William Ransom who founded the firm in 1846.

Mr Harry Urquhart, MPS, FBOA, Pitreavie, near Mount, Peebles. Mr Urquhart qualified in 1929.

Topical reflections

BY XRAYSER

Price-cutting

Your editorial comment on the practice of price-cutting in South Africa suggests that you fear, if you do not at the moment anticipate, something of the kind in this country. For the time being such action can be prevented, and manufacturers have prosecuted successfully in the courts.

The situation in South Africa recalls that it was common in this country in the early years of the century, when it was not unknown for "patent" medicines costing ten shillings and threepence per dozen to be sold for 10½d each. The result was that, far from displaying articles showing such a handsome return, the pharmacist kept them out of sight. But a concerted move to have a recognised and fixed price brought them out of hiding and attracted the attention of grocers to a commodity which showed a better return than, say, sugar, and a new and apparently everlasting lease of life was accorded the cures for headaches, backaches, liver disorders and spots before the eyes.

But I think that you do well to express concern and to sound a warning note. The modern way of commerce is that of the market place and haggling over special terms is the accepted way of life. Large quantity buying may exert pressures difficult to withstand, and pharmaceutically the practice could lead, even in the absence of price-cutting, to sales being "pushed" for additional profit rather than out of a sense of professional discrimination. And if we are to lay claim to professional responsibility we must, at all times, have regard to the assessed needs of the prospective purchaser.

Commercial inducement is not necessarily the first consideration—indeed, it should be the last. It is to be hoped that the responsible official attitude to the sale of medicines will not be undermined from without—or within—but there are powerful lobbies, as the general sale list will ultimately disclose.

Problems

Shortages of many kinds are making themselves felt from day to day. Many of them, we are told, are due to container difficulties, though there are other fields in which we experience disappointment. It becomes clear that the milkman and the brewer are not alone in their problems, but medicines cannot be dispensed in cans. In a fairly long experience, I have packed and dispensed ointments in the inelegant "chip" box of earlier years, to the most modern products of the container industry. But I must not scoff at the chip box, for in the dark days of the war, the discovery of several gross on a high shelf was a welcome find.

I cannot go back so far as to remember when ointments were dispensed in mussel shells, though we may come to that again, but I have used "corruganza" boxes and elegant opal mars with celluloid caps between which and the ointment itself was inserted a carefully cut disc of parchment paper. I have also filled metal tubes and closed the ends with a peculiar spatulate pair of pliers. Then there was, at a later date, a very strong waxed box which was extremely useful in that it could be discarded by the user, because returned jars—unwashed—were not for the fastidious.

Solvent

Just lately I acquired some ointment tubs of a translucent plastic material with a snap-on lid. About a week ago, I used one for wintergreen ointment. The tub now resembles a concertina and is disappearing before my eyes. I think I may have stumbled across a solvent for at least one plastic.

To all chemists who
think there's no
difference between
the Care Chemist Group
and any other scheme....



An apology we're proud to have to make.

You may have noticed that supplies of Oil of Ulay have dried up recently, for which we're truly sorry...and truly grateful.

We make a great product, and you've sold us dry.

But now for the good news: production is up, and growing fast.

You won't catch us out again! But just to be on the safe side, do stock up now. Demand this spring will set new records, stimulated by dramatically different advertising campaign, press and on television. (You'll be hearing more about that later).

There. We've said we're sorry. So please be patient, and re-order soon (so you won't have to say you're sorry when the stampede starts).

OIL OF ULAY
CARSALE, A DIVISION OF
RICHARDSON-MERRELL LTD.
SAFFRON WALDEN,
ESSEX CB 11 3AR.



CARSALE, SAFFRON WALDEN, ESSEX
A DIVISION OF RICHARDSON-MERRELL LIMITED
GENEVA - STOCKHOLM - VIENNA

165 ml.

OIL OF ULAY IS A REGISTERED TRADE MARK

ORDER FORM

GARSALLE
A DIVISION OF RICHARDSON-MERRELL LTD.,
SHIRE HILL, SAFFRON WALDEN, ESSEX CB 11 3AR.

TEL: SAFFRON WALDEN 7431

Don't be caught out!

Please arrange
for delivery of:-

1
a.s.a.p.

	Tick	Quantity
Oil of Ulay 115ml.		
Oil of Ulay 165ml.		
Vitamin Night Cream		

To: Name _____
Address No. _____ Street _____
Town _____ County _____
Post Code _____
Signature _____

N.B. The Wholesaler in your area will be informed of your order immediately.
He will be ready to meet your urgent request for more Ulay.

THE NPU BEGS TO DIFFER.

There is a most decided distinction. What the Care Chemist Group offers you is, in every way, distinctly for the better.

For a start, Care was initiated by NPU members. In structure it is a true partnership of NPU chemists and a consortium of franchised chemist wholesalers. Each partner holds 50% of the equity. Each of Britain's 10,000 independent chemists who take part in the Care Group has a definite influence on its trading policy.

And while other schemes may offer price promotions of a sort, there's not one among them that quite measures up to the overall services offered by Care.

Already the 15 Care wholesaler companies with their 27 depots command a near-national distribution network.

As a combined force we could have the mighty buying power of Boots.

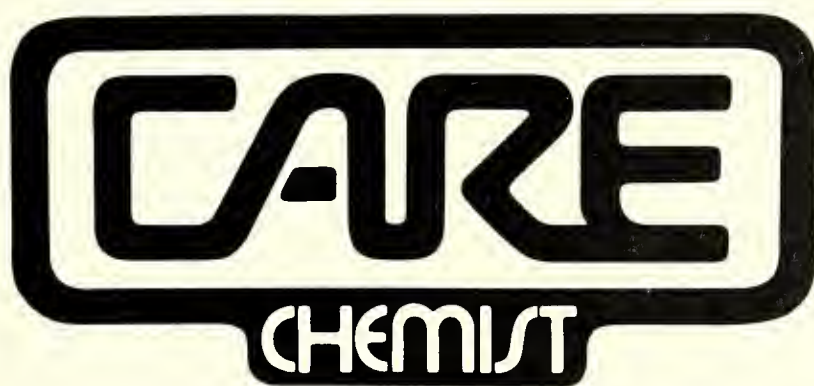
Through the Care Chemist

Group, you get up to 1,800 fast-moving branded products at consistently low prices.

Through Care you also have the advantage of reduced stock holding through a streamlined weekly ordering system... goods clearly invoiced at 'stripped' net prices... manufacturers' bonuses and specials passed on direct to you. And with what other scheme can you reap the benefits of a really strong national advertising and promotional campaign that will, through the NPU, respect your professional status?

Care is the independent chemists own national group. If you think there's no difference between it and any other scheme, think again. Then contact your local Care franchise wholesaler or

Independent Chemists' Marketing Limited,
Mallinson House,
321 Chase Road, Southgate,
London N14 6JN.
Telephone: 01-886 6544.



Trade News

Fluor-a-day Lac goes on

Dental Health Promotions Ltd, 104a Cheyne Walk, London SW10, point out that their Fluor-a-day Lac tablets are still available. It should be noted that the "discontinued" entry in the C&D Price Supplement applies only to Fluor-a-day tablets.

Influvac 800

Duphar Laboratories Ltd, Gaters Hill, West End, Southampton, say supplies of Influvac have now returned to normal and the following are available: single dose ampoules (0.5 ml) 10 dose vials (5 ml), 100 dose vials (50 ml), and nasal spray (25 dose packs).

Bottle washing aid

The national bottle shortage has prompted Syntex Pharmaceuticals Ltd, St Ives House, Maidenhead, Berks, to remind pharmacists that the Selecta spray gun rinser, used in hospital central sterilisation departments, is also "the ideal equipment for the rapid and efficient cleaning of bottles, flasks and a variety of small items of glassware". The rinser (£45.00 + VAT), controls tap water pressure to give a constant flow. It also enables the pressure to be varied from high to low. Eight attachments are supplied for different cleaning requirements.

Crossword reminder

The closing date for the Biovital crossword competition is December 31. Entry forms for the competition, in which the main prize is an 18-inch colour television, are still obtainable from Radiol Chemicals Ltd, Stepfield, Witham, Essex, or from their representatives.

Princess Galitzine cosmetics

The Italian range of cosmetics, Princess Iren Galitzine, at present available only to major stores, is extending its franchise to selected chemists in 1974. The range includes products for cleansing: moisturising biocleansing milk, decongesting

biocleansing milk, purifying biocleansing milk, — all £2.49, foamy cleansing milk, morning cleanser — at £2.25 and Refreshing biocleansing milk (£2.75).

Nourishing products feature moisturising day cream and decongesting day cream (£2.85), normalising day cream (£2.89), emollient moisturising gel, decongesting moisturising gel, normalising moisturising gel and refreshing day cream — all (£3.25); moisturising night cream and decongesting night cream (£3.80), purifying night cream (£3.75), and refreshing night cream (£4.00); plus toning lotions: moisturising tonic lotion and non-alcoholic decongesting lotion (£2.49), and astringent tonic lotion (£2.85).

Also from Princess Galitzine is Irene perfume range consisting of a solid perfume (£10.82), moisturising body perfume (£10.92), Golden Body perfume (£11.80), light perfume atomiser (£9.90), and light perfume (£9.50).

There is also a complete eye makeup range: cleansing cream (£1.98), eye relax tonic (£1.98), eye contour cream (£4.78), eye fatigue dissolver (£4.00), eye shadow stick in six shades (£1.75), opalescent cream eye shadow (£2.25), three eye shadow palettes — two-shades (£2.25), three-shades (£3.45), and six-shades (£3.95).

Details from Cayse Ltd, 393 Chapter Road, London NW2.

Lancôme beauty offer

From January 1974 Lancôme (England) Ltd, 14 Grosvenor Street, London W1X 0AQ are offering free with every purchase of 44g size Absolute night cream (£2.45), either a beauty pack containing Douceur Demaquillante Nutrix (a fluid cleansing emulsion), Bienfait du Matin (day treatment and protective cream), and Tonique Douceur (moisturising skin tonic) all for dry, sensitive skin; or one containing Galatee (cleansing cream milk), Bienfait du Matin, and Fraicheur Tonique (mildly astringent skin tonic) for normal-to-oily skin.

Halo repackaged

The bottle packed range of Halo hair sets and shampoos have been repacked in PVC containers with attractive paper labels. Colgate-Palmolive Ltd, 76 Oxford Street, London W1A 1EN expect the new presentation to have greater consumer appeal resulting in increase in sales. The containers are produced by Blewis & Shaw (Plastics) Ltd, Canbury Works, Lower Ham Road, Kingston Upon Thames, Surrey KT2 5AE.

Falcon campaign

A pre-Christmas television advertising campaign has been announced by Beecham Proprietaries, Beecham House, Great West Road, Brentford, Middlesex, for Falcon. The product has moved from fourth to the second best selling men's hairspray in the UK, say Beecham, and they expect the campaign to increase the share still further.

Bath range addition

A bath oil has been added to the Vivelle bath range by Fasset & Johnson Ltd, 19 Radford Crescent, Billericay, Essex. The 115 cc size bath oil (£0.60) is a turquoise skin softening perfumed oil.



Cyclax offers

Two "special edition" Neojuven Problem Solvers in prepack form are on offer from Cyclax Ltd, 65 South Molton Street, London W1Y 2BS. They include three skin care products for daytime use — a face firmer, moisture cream, and night and day eye cream — all for £3.90 (a saving of £2.55), and three skin care products for use at night — neck firming cream, night and day eye cream, and night and day face cream—all for £3.90 (saving £2).

On offer from March 4, 1974, are four products for sensitive skin at £1.45. They are: a cleansing lotion, skin freshener, moisturiser, and night cream.

Lil-Let competition

Entries for the winter holiday in Tunisia competition are "coming in at a phenomenal rate" say Lilia-White (Sales) Ltd, Charford Mills, Birmingham 8. The competition has ten 14-day holidays for two and 20 weekend holidays as its prizes and has been advertised by the Press and features on specially printed packs of Lil-Lets. Because of the demand, Lilia-White have printed extra competition leaflets available from representatives.

Schick products advertising campaign

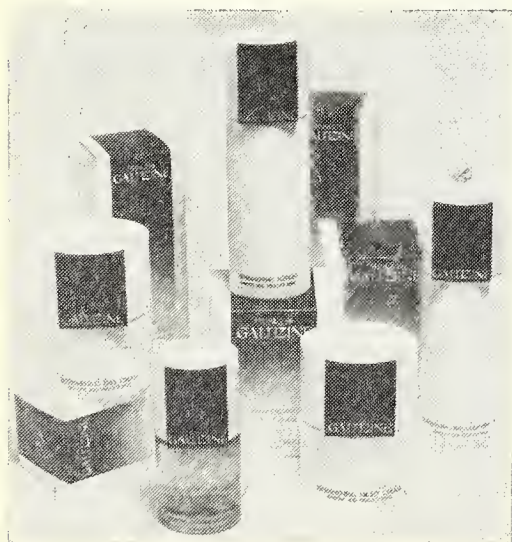
Carmen Curler Co Ltd, exclusive distributors for Schick electrical hair products in the United Kingdom, have decided to advertise Schick hood and hand held hair-dryers in the national media at the peak selling times prior to Christmas.

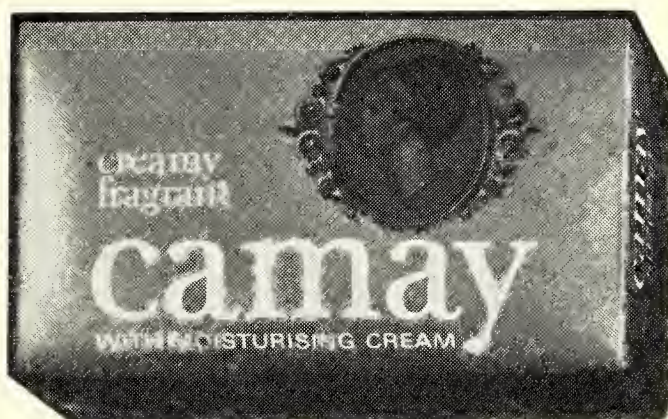
Two separate witty, human situation advertisements have been prepared emphasising the original and attractive gift appeal of the range of Schick hooded dryers and also the men's styling dryer. The Lady Schick time machine is also to be featured in the advertisements.

Leichner's lip 'shiners'

L. Leichner (London) Ltd, 436 Essex Road London N1 3PL have added a lip gloss to their Kamera Klear range. Called Kissers Lip Shiners (£0.33), they are small pots of cream gloss with transparent lids for easy colour recognition. They come in six shades—natural, apricot, coral, rose, ruby and fire, all of which are pearlescent. Obtainable February 1974.

Continued on p 800





GREAT TRADE OFFER FROM CAMAY AND FAIRY TOILET SOAP



**150
MELCOR 380
POCKET ELECTRONIC
CALCULATORS
WORTH £ 69.50 EACH
MUST BE WON IN
A FREE TRADE CONTEST**

- * **FACTS AND FIGURES FAST**
- * **ADDS, SUBTRACTS, MULTIPLIES
AND DIVIDES**
- * **INCORPORATES MEMORY AND CONSTANT
FUNCTIONS**
- * **SIMPLIFIES VAT STOCK TAKING
AND PROFIT CALCULATIONS**

**Get an entry form from your
Wholesaler, Cash and Carry or your
Procter and Gamble salesman**

Introducing the The pocket camera that gives you



Less camera shake.

When we set out to make the perfect pocket camera, we discovered we could cut down on one or two things

So we cut down the size, first of all. And reduced the chances of spoiling a good picture

by incorporating our sensitive red Sensor shutter release system, to reduce camera shake.

The result is our Agfamatic 2000 camera.

The f/9.5 three-element lens also helps in getting sharp enlargements from such tiny negatives.

Opening the Agfamatic 2000 is another eye-opener.

By flicking a small catch underneath, the camera snaps out automatically, ready to shoot.

Pressing the end of the camera in winds on the film and cocks the shutter for another shot. When the camera is closed the lens and viewfinder are fully protected against dust and dirt.

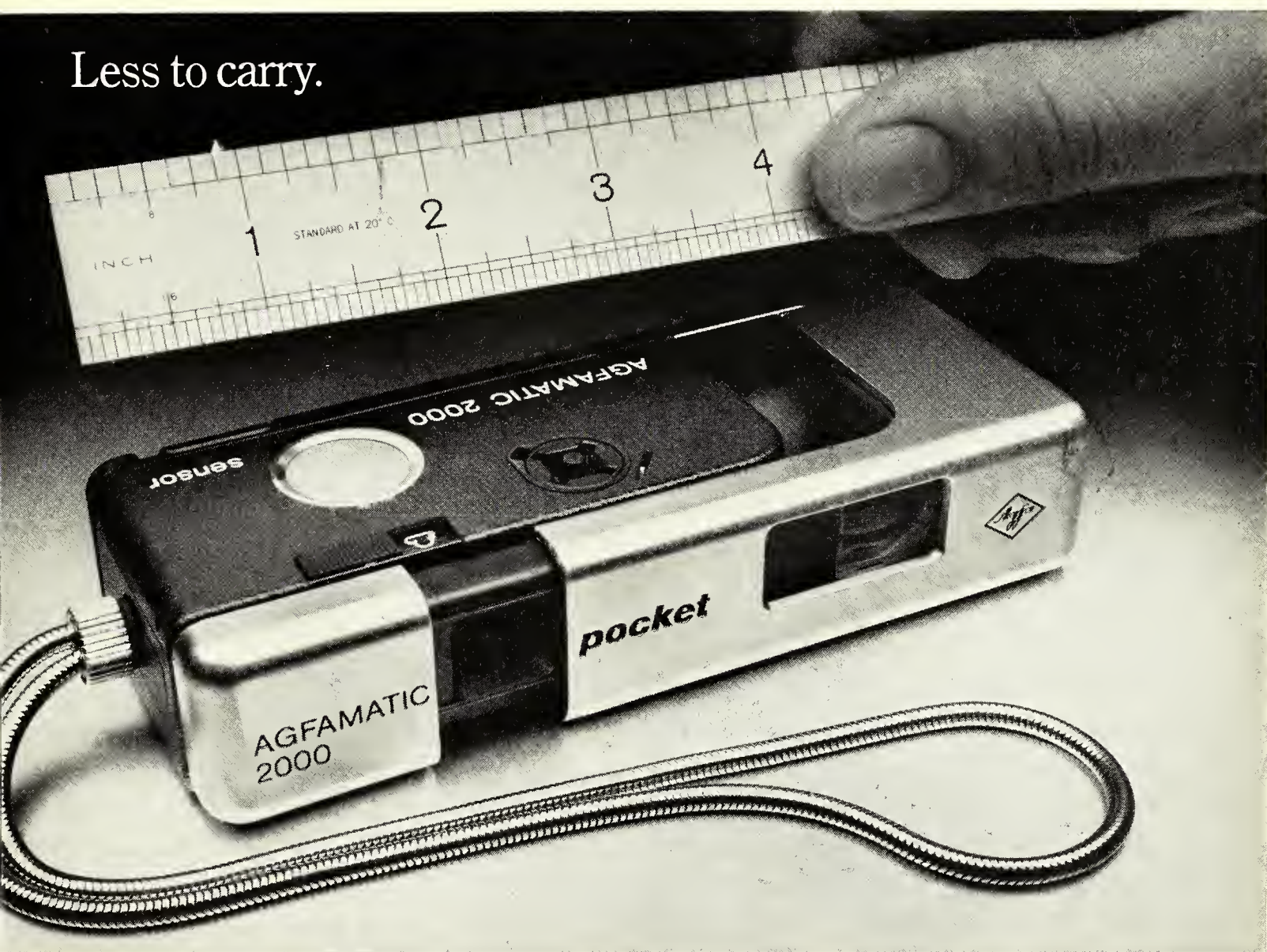
We didn't forget two other important items.

Two shutter speeds for cloudy/flash or sunny conditions. And an attachment for X-type flashcubes. With a special extender to help eliminate red eyes in flash pictures.

Finally, we trimmed the price. To a very neat £17.35*
A bargain when you consider your customers are

Agfamatic 2000. Customers less for their money.

Less to carry.



ing not only the camera, but a flashcube and extender, a soft chrome
st chain and an Agfacolor pocket cartridge film for colour prints.

Which, all in all, is giving them a lot more for their money.
ough they're getting a little less to show for it. **The Agfamatic 2000.**
It's no less of a camera for its size.



*Recommended retail price including VAT. Large outfit with leather pouch £19.04.



Trade News

Paterson developing outfit

A Photolab developing outfit to replace the previous version has been announced by Paterson Products Ltd (UK Distributors: Network Technical Distributors Ltd, Radlet Road, Colney Street, St Albans, Herts). The redesigned pack is half the previous size yet is claimed to give the same protection to the contents. All the kit's items are fitted into an expanded polystyrene pack which has a clear lid.

The kit (£5.91) now contains two film clips and the other items are: universal developing tank, 300 ml measure, thermometer, 250 ml bottle Acutol developer, 250 ml bottle Acufix fixer force film washer, film wiper, and instructions.

Thackray extend ostomy range

Chas. F. Thackray, Park Street, Leeds LS1 1RQ, recently introduced two groups

of ostomy appliances to complement the Schacht Colostomy and ileostomy range.

The disposable self-adhesive appliances are easily fitted, quickly changed, comfortable and unobtrusive in use, according to the makers. The hypo-allergenic adhesive makes prolonged use possible. Two gussets run down the bag to maintain the slim shape and give ample capacity. An odour-proof vent allows flatus to be released when convenient and every bag has a choice of stoma opening sizes.

The re-usable lightweight appliances are designed for use with a double sided plaster or Karaya gum washer and belt and can be washed and re-used.

Vestric December promotions

Vestric national promotions for December feature: Rennies, Contac 400, Colgate dental cream, Ultra Brite, Reban, Harmony hairspray and Harmony shampoo. Details from Vestric Ltd, Chapel Street, Mancun, Cheshire.

Portable electronic calculator

A Company well-known for its adding machines are now listing a portable electronic calculator — the Addmaster PP8 (£47.50 plus VAT). Details of a free trial offer available direct from the manufacturer appear in the advertisement on this page.

on TV next week

Ln — London; M — Midland; Lc — Lancashire; Y — Yorkshire; Sc — Scotland; WW — Wales and West; So — South; NE — North-east; A — Anglia; U — Ulster; We — Westward; B — Border; G — Grampian; E — Eireann; CI — Channel Islands.

Anadin: All except E, CI

Aquafresh: Y, NE

Askit: Sc

Beecham powders: All areas

Buttercup syrup: Y, NE

Carmen rollers and curlers

All areas

Censored aftershave: All areas

Crest toothpaste: Y

Faberge gift range: All except U, CI

Faberge West lotion: All except U, CI

Falcon hairspray: All areas

Fidji perfume: Ln, So

French Almond: M, Y, NE

Hai Karate: All areas

Hedex Seltzer: All except Sc, NE, B

Old Spice: All areas

Oil of Ulay: M, Lc, Sc, WW, So, A, U, We, B, G

Osprey aftershave: G

Philips Philishave range: All except E

Sinex: All areas

Tabac Original: Ln, M, Lc, Y, Sc, So, NE

Trouble aftershave: All except E, CI

Venos: All areas

Vicks vapour rub: All areas

Vosene: All areas

Wilkinson Sword Bonded shaving system:

All areas

Windsong: Ln, M, Y, Sc, So, NE, G

Yardley Sea Jade: All areas

FREE TRIAL OFFER

Percentage Key
and Automatic
Constant

20 hours of
continuous use
on 4 standard
penlight
batteries



FREE set of
batteries, carry
case and mains
adaptor with
every machine

The Addmaster PP8 Companion hand-portable electronic calculator — probably the best currently available — yours for 14 days FREE

Direct from Addmaster only **£47.50** plus VAT
with full 12 months guarantee

SEND NO MONEY

YES

Name (Block Capitals Please)

Name of Business

Delivery Address

Tel. No.

Signature

(Offer is subject to acceptance by Addmaster and applies to U.K. Mainland only. No salesman will call. Allow 14 days for delivery). We regret that this offer cannot be extended to private addresses unless cash is sent with order.

Post this coupon now to:

Addmaster Corporation (UK) Ltd. Tel: 01-540 1211/2054
Addmaster House, Mortimer Road, Mitcham, Surrey CR4 3TP
Registered Number 580772. Registered Office as above

PP56

NO SALESMEN
WILL CALL

NOTICE TO CHEMIST WHOLESALEERS

Serving
High Wycombe, Bucks area

We are prepared to place the majority of our NHS orders (our annual wholesaler accounts for NHS items alone are in excess of £60,000) with the wholesaler able to provide a Saturday morning order call and a delivery before 12 noon.

VICTORIA PHARMACY
HIGH WYCOMBE, BUCKS.

New products



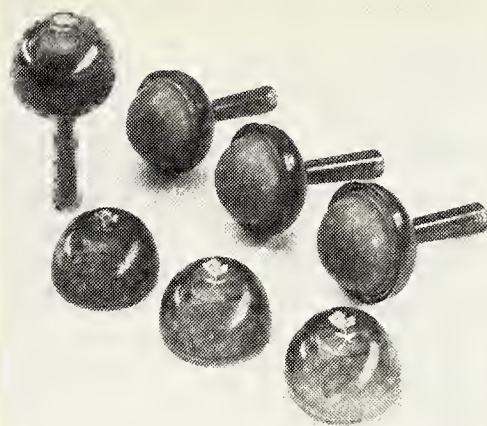
Cosmetics and toiletries

Sea Maiden bath range

Yardley have introduced a bath range specially designed to appeal to seven to 12 year old girls, called Sea Maiden. The range has a foam bath (£0.60) which colours the water blue, a two-coloured soap in golden yellow and turquoise (£0.34), and talc (£0.34), all with "a delicate perfume". They are packaged in gaily coloured containers with birds, porpoises and mermaids depicted in blue, golden yellow and green (Yardley of London Ltd, 33 Old Bond Street, London W1X 4AP).

Lancôme pommettes

Resembling a tortoise-shell "toffee apple" the new blusher from Lancôme is called pommette (£1.30). The blusher unscrews in the middle and is applied by the fingers. There is a choice of four colours—peche



(Peach), corail (coral), ambre (amber) and mangue (rose-beige), and it is presented in "tortoise-shell" with the Lancôme rose in gold (Lancôme (England) Ltd, 14 Grosvenor Street, London W1X 0AQ).

Over the counter medicinals

Aspro Effervescent in London

Nicholas Products are test marketing in the London area Aspro Effervescent tablets, foil-wrapped in packs of 12 (£0.25). The launch is being backed by television advertising from this week (Nicholas Products Ltd, Slough, Bucks).

Electrical

Philips extend range

The Ladyshave Special (£8.95) is the latest addition to Philips Electrical beauty care range. The foil head has two trimmers, suitable for shaving legs and underarm, and comes in a circular case in cerise.

The Ladyshave Special also features in the latest beauty set (£14.95) with massagers, cream and lotion applicators, nail files, a cuticle pusher and a brush and nail buffer. The set is in a circular case in deep brown (Philips Electrical Ltd, Century House, Shaftesbury Avenue, London WC2H 8AS).

Prescription specialities

CHLORAMPHENICOL

Manufacturer Parke, Davis & Co, Usk Road, Pontypool, Mon NP4 8YH.

Description Orange-red linctus, each 5 ml containing diphenhydramine hydrochloride 2.5 mg, dextromethorphan hydrobromide 5 mg, pseudoephedrine hydrochloride 50 mg, ammonium chloride 125 mg, sodium citrate 75 mg, chloroform 20 mg, menthol 5 mg.

Indications Relief of cough and its consecutive symptoms; hay fever and other allergic conditions affecting the upper respiratory tract

Contraindications Known hypersensitivity to constituents. Concurrent administration of MAO inhibitors

Dosage Adults — 5 ml every 4-6 hours. Children, 4 to 12 years—2.5-5 ml every 6 hours. 2 to 4 years — 1.25 ml every 6 hours

Precautions Care in pregnancy, cardiovascular disease. May cause drowsiness. If

affected, patients should not drive or operate machinery.

Storage Keep container tightly closed

Dispensing diluent Syrup

Packs 500 ml (£1.41 trade) and 2.25 litres (£5.85)

Supply restrictions P1, S7

Issued December 1973

Chloromycetin Redidrops

Parke, Davis & Co, Usk Road, Pontypool, Mon NP4 8YH have introduced a 5 ml size (£0.25 trade) of Chloromycetin Redidrops. The formula remains unchanged.

Influenza B vaccine

Limited supplies of Admune-Mono B vaccine are now available for protection of high-risk patients against the new B Hong Kong strain of influenza. Each 0.5 ml single dose ampoule (£0.60 trade) contains 600 i.u. of B/HK/8/73 (BDH Pharmaceuticals Ltd, Birkbeck Street, London E2 6LA).

Smith Miller and Patch eye products

Knox Laboratories Ltd, 50 Weston Road, Aston Clinton, Aylesbury, Bucks HP22 5E2, have taken over from Armour Pharmaceutical Co Ltd. the marketing and distribution of Smith Miller & Patch ophthalmic specialities.

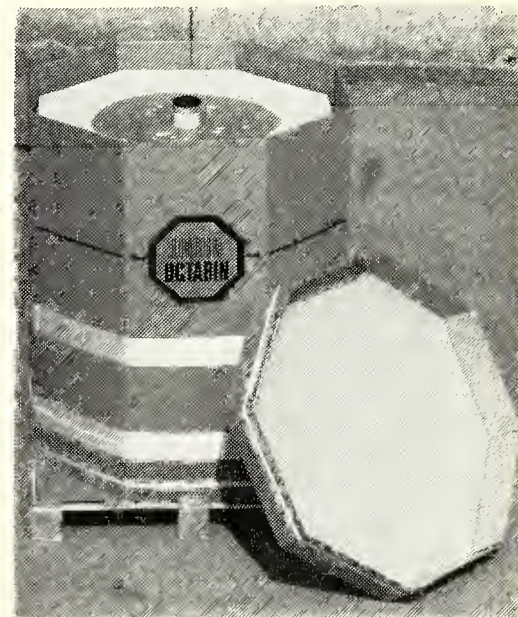
Equipment

Automatic Document writer

Rapid Data Systems have available model 420/DT 166 data preparation equipment.

The model 420 document writer selects and prints automatically at high speed from the data presented and the formatting of the copy is carried out in accordance with one of the 20 programmes available in the machine logic.

The integrated system provides an optical reading capability through the DT 166 terminal document reader. Designed specifically to meet the requirements of the total system using simple optical mark reading techniques. (Rapid Data Systems International Ltd, New Lane, Havant, Hants).



The liquid Octabin — a new "one-trip" semi-bulk container for distribution of liquids — comprises an octagonally-shaped outer case made from double-wall corrugated fibreboard and an octagonal inner liner rotationally moulded from low-density polyethylene. It is available with capacities of 1,000 l and 1,300 l; both are secured to a timber pallet. Octabin for corrosive and non-corrosive liquids has been developed as a joint project by Ashton Containers Ltd, and P.D. (Technical Mouldings) Ltd, a member of the Associated Packaging Group, 17 Dryden Court, Parkleys, Ham Common, Surrey.

Accurate filling

Capacities from one dram to one quart can be filled accurately and automatically, at up to 80 containers a minute, by a new filling machine from Shandon Southern Instruments, Frimley Road, Camberley, Surrey. The Filamatic DAB-32-SL machine is manufactured by the National Instrument Co USA and will handle any liquid or semi-liquid which will flow.

The machine fills four containers simultaneously, either automatically or semi-automatically, and can handle cosmetic products, including mascara, eye shadow, lipstick, creams and lotions, as well as thixotropic gels and volatile solvents.

The machine is produced as a bench model measuring 14in by 21in by 19in and weighs 160 lbs. A cabinet mounted version is also available.

Therapeutic advances in 1973

The most common chronic illnesses in Britain are the rheumatic diseases. An Office of Health Economics report published in March said that over one quarter of the population has suffered from them at one time.

Two anti-inflammatory agents introduced this year are said to have significantly fewer side effects than other such compounds. Naproxen (Naprosyn) in doses of 500mg daily has been shown to have a therapeutic effect equivalent to daily doses of 4g aspirin in rheumatoid arthritis, and indomethacin 100mg in osteoarthritis. But with Naproxen, gastrointestinal disturbance is rare. Tolerance has also been shown in patients taking the drug continuously for up to four years.

Naproxen, a derivative of naphthalene, is unrelated to the salicylates, corticosteroid hormones or to any other anti-inflammatory compounds previously in use. It has marked analgesic and antipyretic properties and may act by inhibiting prostaglandin synthesis. It binds strongly to plasma proteins and can displace other protein-bound drugs such as hydantoins, anticoagulants and long-acting sulphonamides, so that toxic effects of the latter may increase.

Ketoprofen (Orudis) bears a slight similarity in structure to ibuprofen but has greater analgesic and anti-inflammatory activity. Ketoprofen has a therapeutic efficiency comparable to indomethacin and probably acts by inhibiting prostaglandin synthesis.

No serious side effects have been reported, those occurring are mainly minor gastro-intestinal disturbances. Another advantage is that ketoprofen has no effect on liver drug-metabolising enzymes so is unlikely to interact with drugs metabolised by the liver.

CNS drugs

Drugs acting on the central nervous system form the largest group of new compounds introduced to the British market this year. Two, potassium clorazepate and lorezapam, belong to the benzodiazepine group of tranquillisers, having muscle relaxant, sedative and anticonvulsant properties.

Potassium clorazepate (Tranxene) is usually given as a single daily dose of 15mg. In the acid pH of the stomach most of the drug is converted into the anxiolytic nordiazepam which has a plasma half life of 24 hours. Any absorbed in unchanged form rapidly breaks down to nordiazepam in the systemic circulation.

Lorazepam (Ativan) is given in divided doses from 1mg to 10mg daily for anxiety, psychosomatic disorders, insomnia and as a pre-anaesthetic sedative. Both drugs may potentiate other centrally acting compounds and alcohol should be avoided.

Both have similar side effects, reported rarely, of drowsiness, dizziness, headaches, blurred vision and gastro-intestinal upset.

Benperidol (Anquil), a butyrophenone neuroleptic, is claimed by the makers to be the first non-steroidal treatment with a specific action on sexual disorders. It "removes the desire to indulge in anti-social forms of sexual behaviour". Although no information on the specific anti-libidinal activity in animals is available, the drug may inhibit the pituitary gland via the hypothalamus or may have a peripheral anti-androgenic effect. But feminisation does not occur.

As with other neuroleptics, benperidol may induce extra-pyramidal reactions which are controllable with anti-Parkinson drugs. Drowsiness or insomnia may occur initially and the effects of other CNS depressants may be potentiated. The recommended dose is 0.25mg to 1.5mg daily in divided doses.

Parkinson's disease

Two new compounds have been introduced for the treatment of Parkinson's disease. Benapryzine hydrochloride (Bri-zin), an anticholinergic, is as effective as benzhexol in controlling rigidity, tremor and akinesia but has fewer side effects such as dry mouth, hallucinations and confusion. Benapryzine in doses of 50mg three or four times daily may be used with levodopa or for long term prophylaxis in patients receiving major tranquillisers. Peripheral anticholinergic side effects — blurred vision, constipation and gastro-intestinal upsets — may occur.

The use of levodopa followed the discovery that patients with Parkinson's disease have an abnormally low brain concentration of dopamine. Levodopa is decarboxylated to dopamine in the brain but is also decarboxylated in the peripheral circulation, causing nausea and vomiting, orthostatic hypotension, dizziness and sometimes cardiac arrhythmias. Establishing an effective dose of levodopa may take several months.

Carbidopa, a decarboxylase inhibitor, prevents this extracerebral decarboxylation of levodopa, making more of the latter available for transport into the brain and conversion to dopamine. Sinemet, containing carbidopa 25mg and levodopa 250mg, provides effective plasma levels of levodopa at doses about 75 per cent lower than those needed with levodopa alone. Fully effective doses are usually obtained within seven days.

Concurrent administration of pyridoxine with levodopa is contra-indicated because the vitamin increases extracerebral decarboxylation. But carbidopa counteracts this effect so Sinemet may be given to patients taking vitamin tablets or anti-emetics containing vitamin B₆.

Two new diuretics have been introduced. Bumetanide (Burinex) is a short acting diuretic more potent than either frusemide or ethacrynic acid. Bumetanide, a metanilamide derivative, acts in the ascending limb of the loop of Henle and possibly in the proximal tubule. The usual daily dose is 1mg. Diuresis begins within 30 minutes, reaches a peak between 1-2 hours and is virtually complete in 4-6 hours.

Metolazone (Zaroxolyn) has a diuretic activity lasting 12-18 hours at a single daily dose of 5 to 10mg, with a peak between 1½-2 hours. It inhibits reabsorption of sodium chloride and water in the distal and proximal convoluted tubules. In mild to moderate essential hypertension, metolazone is as effective as hydrochlorothiazide or chlorthalidone.

Both bumetanide and metolazone tend to increase the excretion of potassium so patients on long term treatment should be encouraged to take a high potassium diet, particularly if digitalis compounds are given concurrently. Both diuretics may potentiate antihypertensives.

Tamoxifen (Nolvadex) is an anti-oestrogenic drug which probably acts by competition with oestradiol at specific receptor sites or by inhibition of oestrogen production. It is used in the treatment of breast cancer where a number of tumours are oestrogen dependent. The rate of tumour response is similar to that with androgens or oestrogens but tamoxifen does not cause the virilisation seen with the former and produces less water retention and gastro-intestinal disturbance than the latter. The most common adverse reactions with tamoxifen occur as a result of its anti-oestrogenic properties eg hot flushes, vaginal bleeding and pruritus vulvae. Other side effects include tumour pain and lightheadedness. The drug should not be used for breast cancer in pre-menopausal women.

Antibiotics

Minocycline hydrochloride is a broad spectrum antibiotic and a derivative of tetracycline (7-dimethylamino-6-deoxy 6-demethyl tetracycline). It is effective against certain tetracycline resistant organisms, particularly staphylococci. Other advantages are its high tissue penetration and long action. The usual dose is two 100mg tablets initially followed by 100mg every 12 hours. Safety for use in children has not yet been established. There is evidence that minocycline is less likely to produce photosensitivity than most of the other tetracyclines. Patients should be warned that they may experience some dizziness or lightheadedness.

Spectinomycin (Trobicin) is claimed to be "the first gonorrhoea-specific antibiotic". It is highly active against most strains of *Neisseria gonorrhoeae*, by inhibi-

on of protein synthesis in the bacterial cell. *In vitro* studies have shown no cross-resistance of *Neisseria gonorrhoeae* between spectinomycin and penicillin. Spectinomycin is produced by a soil micro-organism, *Streptomyces spectabilis*, and is chemically different from other antibiotics.

Peak serum concentrations are obtained one hour after intramuscular injection of 4g for males, 4g for females. Serum concentrations inhibitory to most gonococcal strains last up to 8 hours. During the clinical trials no anaphylactic reactions or other serious side effects were seen. Dizziness and fever have been reported rarely. Spectinomycin is contra-indicated in syphilis which requires prolonged therapy; high doses of antibiotics for short periods may mask symptoms of incubating syphilis.

Finally, some new topical preparations. Clotrimazole (Canesten) is a broad spectrum anti-fungal and trichomonocidal agent which is also effective against some gram positive bacteria. Available as cream and vaginal tablets, clotrimazole is indicated in infectious leucorrhoea, vaginal candidosis and trichomoniasis, and dermatomycoses due to dermatophytes, yeasts and moulds.

Although the precise mechanism of action is unknown, clotrimazole seems to act on the cell membrane of the fungi and inhibit protein synthesis. The drug pene-

trates the skin to reach therapeutic levels in the germinal layer but there is almost no systemic absorption.

Clobetasol 17-propionate (Dermovate) is a potent topical corticosteroid for the treatment of inflammatory dermatoses such as psoriasis, lichen planus, eczema, seborrhoeic dermatitis and contact sensitivity reactions. Its main advantage is its increased potency over other fluorinated topical corticosteroids such as betamethasone valerate and fluocinolone acetonide.

Bufexamac (Feximac, Parfenac) is a synthetic, anti-inflammatory compound which may act by prostaglandin inhibition. It is indicated in acute and chronic dermatoses and as an adjuvant in the treatment of rheumatic and traumatic conditions. Percutaneous absorption is slight but may be increased by massage or iontophoresis in rheumatic conditions. Bufexamac has no systemic effect. Local intolerance, which is rare, has been attributed to components of the cream vehicle.

The rush of new products introduced in the few months before the Medicines Act came into force has now settled to a steady flow. The small number of completely new compounds introduced this year reflects the difficulties involved in putting a new product onto the market under the stringent requirements of the Committee on Safety of Medicines.

Methods of pyrogen removal from water discussed at symposium

The pharmacopoeial authorities will need a large amount of evidence before accepting any method other than distillation for pyrogenising water.

Mr C. A. Johnson, scientific director, I.P. Commission, speaking at a seminar on pyrogen free water at the Lorch Foundation, Lane End, last week said that the only pharmacopoeia which had recognised the use of deionisation for producing water for injections was the Swiss. This recognition ceased on December 1 when the monograph on water for injections in the supplement to the European Pharmacopoeia became effective.

The chairman for the morning session, Dr T. D. Whittet, chief pharmacist, Department of Health and Social Security, said that pyrogens from different organisms vary in stability and in their reaction towards ion exchange resins. His paper of 1961 had shown that the ion exchange plants then available could produce pyrogen free water but were unreliable. He had forecast that many tests would need to be done before the pharmacopoeial authorities could accept this method. He said reverse osmosis is being tested, with Departmental support, as a method of producing pyrogen free water.

Dr C. H. R. Palmer, senior lecturer, School of Pharmacy, City of Leicester Polytechnic, discussed the biochemical aspects of pyrogens. Different pyrogens may be removed from water by different resins. While the majority of pyrogens are removed by strongly basic anion exchange resins, some are removed only by strongly acidic cation exchange resins. Mixtures of pyrogens present in tap water are almost

always removed by passage through columns of the acidic resins followed by the basic resins.

Mr Risto Saari, Nord-Aqua Oy Helsinki, outlined the theory of multi-stage distillation systems. Using small columns and high steam velocities these stills have a compact size compared to capacity and high quality of water due to effective drop separation in the still. The pressure column system also saves energy and cooling water costs. This Finn-Aqua system is made by Santasalo Sohlberg Oy, Helsinki, who sponsored the symposium together with the Elga Group and Bernard Strutt Agencies Ltd.

Professor L. G. Saunders, School of Pharmacy, University of London, chairman for the afternoon session, described plants combining a mixed bed and an anionic resin bed with filtration units. The plants have been extensively tested and produce pyrogen free water of pharmacopoeial quality.

Mr J. B. Goodall, the Elga Group, outlined methods for the pre-purification of the water supply to stills saying that the pre-purification of water greatly improves the efficiency of stills and removes the need for descaling them in hard water areas.

Mr F. R. Stiff, Lamps and Machines Products Ltd, discussed the use of ultra violet light to reduce the bacterial contamination of purified water systems. He stressed that although valuable in certain circumstances, it is a disinfection method rather than a sterilisation process and must not be relied upon to correct procedures which are otherwise unsound.

Westminster report

Collection and delivery service reimbursement

Mr John Pardoe asked the Secretary for Social Services whether he would again consider the direct reimbursement to pharmacists of costs associated with the collection and delivery of prescriptions in rural areas of England and Wales.

Mr Michael Alison, Under Secretary, said he had nothing to add to the reply given to Mr Pardoe on November 26. Mr Pardoe said that the concept of a free Health Service was made a total charade in rural areas like Cornwall where many people had to spend anything between 50p and £1 on fares in order to get their prescription. Mr Alison said Cornwall was renowned for the fact that friends, relatives and local tradesmen were willing to fetch and carry on behalf of those they serve.

Consumer product safety

The Prime Minister, asked in the Commons to consider transferring departmental responsibility for the safety of consumer products from the Home Office to the Department of Trade and Industry, promised to "keep this suggestion in mind". Mr Laurie Pavitt drew attention to the fact that, apart from medicines, consumer products are not the subject of safety regulations. "Will the Prime Minister look at the Food and Drugs Act in the United States which covers medicines for therapeutic purposes and also goods consumed for other purposes?"

Mr Heath promised to see whether there was a "gap" in relation to such products.

Diabetic foodstuffs

Mr David Mudd asked the Secretary for Social Services, if he was aware of the increase in the price of many diabetic foodstuffs, and if he would consider raising supplementary entitlements to offset the increases in appropriate cases.

Mr Paul Dean, Under Secretary, replied that supplementary benefit scale rates were substantially increased from October. "The standard amounts allowed by the Supplementary Benefits Commission for the additional expenses of special diets are kept under review by the Commission and are increased periodically in the light of movements in the food component of the retail prices index."

Mr Sydney Chapman MP has been appointed Parliamentary Private Secretary to Mr Michael Alison and Mr Paul Dean, joint Parliamentary Secretaries at the Department of Health and Social Security. He succeeds Mr Patrick Cormack, MP for Cannock.

Amendments to BPC, B Vet C and European Pharmacopoeia

The Council of the Pharmaceutical Society of Great Britain has authorised the following amendments to the British Pharmaceutical Codex 1973 which are effective December 1.

Page 26. (Amphetamine Sulphate), footnote on AMPHETAMINE SULPHATE TABLETS, B.P.: *amend* to "The quantity of amphetamine sulphate in each tablet should be specified by the prescriber. Tablets containing 5 mg are available."

Page 47. (Benzalkonium Chloride Solution)—OTHER NAMES: for "Empiquat BAC" read "Empigen BAC".

Page 65. Calciferol: *add* the synonym "Ergocalciferolum". Standard: *amend* to "It complies with the requirements of the European Pharmacopoeia. It occurs as colourless or slightly yellow crystals or a white or slightly yellow powder. It has a melting point of 113° to 116°. It contains approximately 40,000 Units of antirachitic activity (Vitamin D) per mg."

Page 75. Carbachol, footnote on CARBACHOL INJECTION, BP: for "dextrose" read "anhydrous dextrose".

Page 82. (Cascara), footnote on CASCARA TABLETS, BP: for "not less than 50 per cent consists of cascariosides" read "not less than 40 per cent consists of cascariosides".

Page 86. Cephaloridine—Solubility: for "in 12 parts of water" read "in 5 parts of water".

Page 141. Danthron—OTHER NAMES: *delete* "Dorbanex".

Page 148. (Dexamphetamine Sulphate), footnote on DEXAMPHETAMINE TABLETS, BP: *amend* to "The quantity of dexamphetamine sulphate in each tablet should be specified by the prescriber. Tablets containing 5 mg are available."

Page 164. Dihydrocodeine Tartrate, footnote on DIHYDROCODEINE INJECTION, BP: *amend* to "It consists of a sterile solution of dihydrocodeine tartrate in Water for Injections containing 0.1 per cent of sodium metabisulphite. The quantity of dihydrocodeine tartrate in each container should be specified by the prescriber. Ampoules containing 50 mg in 1 ml are available. It should be protected from light."

Page 262. Lavender Oil—Solubility: for "English oil, in 3 parts of alcohol (30 per cent)" read "English oil, in 3 parts of alcohol (80 per cent)".

Page 290. Mephentermine Sulphate, footnote on MEPHENTERMINE INJECTION, BP: *amend* to "It consists of a sterile solution of mephentermine sulphate in Water for Injections. The equivalent quantity of mephentermine base in each container should be specified by the prescriber."

Page 306. (Methylamphetamine Hydrochloride), footnotes: *amend* to "METHYLAMPHETAMINE INJECTION, BP. It consists of a sterile solution of methylamphetamine hydrochloride in Water for Injections. The quantity of methylamphetamine hydrochloride in each container should be specified by the prescriber. Ampoules containing 30mg in 1.5ml are available. METHYLAMPHETAMINE TABLETS, BP. The quantity of methylamphetamine hydrochloride in each tablet should be specified by the prescriber."

Page 307. Methylcellulose—METHYLCELLULOSE 450: for "400 to 500 centistokes" read "350 to 550 centistokes".

Page 346. Pancreatin—Actions and uses, second paragraph: *amend* to "The enzymic activity of pancreatin is now expressed in units and the minimum specified by the British Pharmacopoeia for each component is approximately two and a half times the minimum of the British Pharmacopoeia 1968. Pancreatin having about twice the minimum permitted potency is commonly specified for the treatment of fibrocystic disease, to enable the high doses required to be given in reasonably small bulk."

Page 365. Phenmetrazine Hydrochloride, footnote on PHENMETRAZINE TABLETS, BP: *amend* to "The quantity of phenmetrazine hydrochloride in each tablet should be specified by the prescriber".

Page 413. Propylene Glycol—Standard, line 3: *after* "odourless" *insert* "or almost odourless".

Page 438. Senna Leaf—CONTENT OF TOTAL ANTHRAQUINONE GLYCOSIDES, lines 14-15: for "0.05 ml of hydrochloric acid" read "0.1 ml of 2N hydrochloric acid".

acid". Lines 15-16: for "two successive 15-ml portions" read "three successive 15-ml portions". Line 22: for "on a water-bath" read "in a water-bath". Line 32: for "10.0 ml" read "20.0 ml". Line 38: for "210" read "200".

Page 476. Sucrose: *add* the synonym "Saccharum".
Page 498. Tetracycline Hydrochloride: *add* "SYNONYM: Tetracyclini Hydrochloridum". Standard: for "British Pharmacopoeia" read "European Pharmacopoeia".

Page 506. Thiopentone Sodium, footnote on THIOPENTONE INJECTION, BP: *delete* "immediately before use" and *after* "Water for Injections." *add* "It should be freshly prepared and used within twenty-four hours."

Page 534. Water for Injections: *add* the synonym "Aqua ad Iniectionem". Standard: for "British Pharmacopoeia" read "European Pharmacopoeia".

Page 553. Botulinum Antitoxin—SYNONYM: for "Antibotulinum" read "Antibotulinicum".

Page 566. Rubella Vaccine (Live Attenuated)—Introductory paragraph, line 3: for "Water for Injections" read "a suitable sterile liquid". Standard, lines 4-5: for "Water for Injections" read "a suitable sterile liquid".

Page 577. Yellow Fever Vaccine, third paragraph: *amend* to "The resultant suspension is clarified by centrifuging or other suitable means. A suitable stabiliser may be added to the clarified vaccine, which is then distributed in sterile glass containers and dried from the frozen state before the containers are sealed." Fourth paragraph, line 4: *after* "solution" *insert* "so that the reconstituted vaccine is".

Page 600. Diameter and tensile strength of stainless steel sutures, heading of third and fourth columns: *amend* to "Average breaking force on a straight pull (kgf)".

Page 671. Ephedrine Elixir—CONTENT OF EPHEDRINE HYDROCHLORIDE line 11: for "0.1N hydrochloric acid" read "1N hydrochloric acid".

Page 679. Liquid Paraffin and Magnesium Hydroxide Emulsion, formula: *amend* the quantity of Magnesium Hydroxide Mixture to 735 ml and the quantity of Chloroform Spirit to 15 ml. CONTENT OF MAGNESIUM HYDROXIDE: *amend* the limits to 5.1 to 7.0 per cent w/w.

Page 695. Sulphacetamide Eye-drops, fourth paragraph: *amend* to "A plain cap with an airtight seal should be used as the closure for the final container. A separate screw cap fitted with a teat and dropper, suitably wrapped and sterilised, should either be substituted for the plain cap by the pharmacist immediately before issue, care being taken to avoid contamination, or the wrapped sterile dropper assembly should be issued to the patient with instructions to exchange it for the plain cap on first using the eye-drops."

The precautions taken in preparing these eye-drops are necessary because, in addition to degradation by oxidation, some hydrolysis of the active ingredient to sulphanilamide occurs. The sodium metabisulphite used as antioxidant tends to increase the rate of hydrolysis, and therefore the sodium metabisulphite concentration should not exceed 0.1 per cent w/v. In order that this small concentration of sodium metabisulphite should remain effective it is essential that as much oxygen as possible is removed from the solution during preparation and that the solution is protected from atmospheric oxidation during storage prior to use.

Page 743. Fusidic Acid Mixture, second footnote: *amend* to "This mixture should not be diluted. The general direction given under Mixtures that the preparation should be diluted so that the dose is contained in 5 ml does not apply to this mixture; it may be necessary for a dose of 2.5 ml to be measured by the patient in a 5-ml spoon; if a dose smaller than 2.5 ml is required, the dose should be measured by means of a graduated pipette."

Page 788. (Intraperitoneal Dialysis Solutions), footnote on Intraperitoneal Dialysis Solution (Acetate), last line: for "lactate" read "acetate".

Page 821. (Benzoin Tincture, Compound), line 7: for "0.890 g" read "0.880 g".

Page 851. Dioctyl Sodium Sulphosuccinate, 0.005M: line 3, for "1000 ml" read "100 ml".

Page 886. Lead Solution (A), Standard: *after* "1000 ml" *insert* "and dilute 10 ml of this solution to 1000 ml with water".

Page 887. (Lead in Bismuth Carbonate), left-hand column, line 26: *before* "standard lead" *insert* "dilute".

Page 919. Culture Media: lines 15-16, for "Transfer 50-ml, 100-ml, or 150-ml portions, as appropriate," read "Transfer appropriate volumes (see below under QUANTITIES TO BE USED IN THE TEST)."

Test Procedure for Dressings other than Paraffin Gauze Dressing: for the statement under "QUANTITIES TO BE USED IN THE TEST. 1. Culture medium:" read "use a volume just sufficient to ensure that the test portion becomes saturated and remains completely below the surface of the medium during the test; generally, this volume will be between 20 and 150 ml depending upon the absorbency and volume of the test portion."

Page 920. In the table at the top of the right-hand column, in the entry for more than 500 packages, *amend* the number to be taken to "2 per cent or 20 packages whichever is the less".

British Veterinary Codex

Publication of new editions of the British Pharmacopoeia and the British Pharmaceutical Codex has effected many substances and preparations of the British Veterinary Codex 1965, especially those described as conforming to the standards of the British Pharmacopoeia or the British Pharmaceutical Codex. In addition to changes in the standards of most of the substances and preparations affected, a considerable number have changed their status in relationship to these two publications. The substances and preparations of the British Veterinary Codex 1965 affected by these changes are reclassified in the following lists and all references in the British Veterinary Codex to the British Pharmacopoeia and the British Pharmaceutical Codex should now be regarded as referring to the 1973 editions of these two publications.

The following substances of the British Veterinary Codex 1965, formerly required to conform to the requirements of the British Pharmaceutical Codex must now conform to the requirements of the British Pharmacopoeia 1973.

Part I monographs: Betamethasone Sodium Phosphate, Phenethicillin Potassium, Urea.

The following substances of the British Veterinary

Codex 1965, formerly required to conform to the requirements of the British Pharmacopoeia must now conform to the requirements of the British Pharmaceutical Codex 1973.

Part I monographs: Chlorinated Lime, Heavy Kaolin, Lead Acetate, Proflavine Hemisulphate, Suramin.

Part III monographs: Injection of Suramin, Paraffin Ointment, Poultice of Kaolin, Solution of Calcium Hydroxide, Solution of Lead Subacetate, Strong, Solution of Lead Subacetate, Dilute, Solution of Morphine Hydrochloride.

The following substances of the British Veterinary Codex 1965, formerly required to conform to the requirements of the British Pharmacopoeia or the British Pharmaceutical Codex must now conform to the requirements of the European Pharmacopoeia.

Part I monographs: Acetylsalicylic Acid, Adrenaline Acid Tartrate, Alum, Ammonium Chloride, Aneurine Hydrochloride (Thiamine Hydrochloride), Ascorbic Acid, Atropine Sulphate, Barium Sulphate, Prepared Belladonna Herb, Benzocaine, Benzylpenicillin, Betamethasone, Bismuth Carbonate, Borax, Boric Acid, Butobarbitone, Caffeine, Calcium Carbonate, Calcium Gluconate, Carbon Dioxide, Cascara, Cetrimide, Chloral Hydrate, Chloramphenicol, Chlorethracine Hydrochloride, Cocaine Hydrochloride, Codeine Phosphate, Cortisone Acetate, Cyanocobalamin.

Demethylchlortetracycline Hydrochloride (Demeclocycline Hydrochloride), *Dextrose, Digitoxin, Digoxin, Dimercaprol, Ergometrine Maleate, Erythromycin, Gallamine Triethiodide, Gentian.

* Anhydrous dextrose for parenteral use Ph.Eur. Since the term dextrose is now used by the British Pharmacopoeia to indicate the monohydrate the form required (anhydrous or monohydrate) should be specified.

Hydrocortisone, Hydrocortisone Acetate, Hyocine

hydrobromide, Hyoscyamus, Iodine, Lignocaine Hydrochloride, Liqueurice, Heavy Magnesium Carbonate, Light Magnesium Carbonate, Light Magnesium Oxide, Magnesium Sulphate, Methyl Salicylate, Morphine Hydrochloride, Neomycin Sulphate, Nicotinamide, Nikethamide, Nitrous Oxide, Noradrenaline Tartrate, Oxygen, Oxytetracycline Dihydrate, Oxytetracycline Hydrochloride.

Phenacetin, Phenobarbitone, Phenoxymethylpenicillin, Phenylbutazone, Physostigmine Salicylate, Propylcarpine Nitrate, Polymyxin B Sulphate, Potassium Permanganate, Potassium Iodide, Potassium Permanganate, Prednisolone, Procaine Hydrochloride, Progesterone.

Riboflavin, Silver Nitrate, Sodium Bicarbonate, Sodium Carbonate, Sodium Chloride, Sodium Iodide, Sodium Phosphate, Anhydrous Sodium Sulphate, Streptomycin Sulphate, Sulphadimidine, Suxamethonium Chloride, Testosterone Propionate, Theophylline, Thiopentone Sodium, Tolbutamide, Tubocurarine Chloride, Zinc Oxide, Zinc Sulphate.

The following substances of the British Veterinary Codex 1965 must conform to the requirements of the British Pharmacopoeia 1968.

Part I monographs: Aminacrine Hydrochloride, Acictracin, Prednisone Acetate.

Part III monographs: Solution of Cresol and Soap.

The following substances of the British Veterinary Codex 1965 must conform to the requirements of the British Pharmacopoeia 1963.

Part I monographs: Linseed Oil, Menaphthone Sodium Sulphate, Picrotoxin, Prednisolone Acetate.

Part III monographs: Injection of Menaphthone Sodium Bisulphate, Injection of Picrotoxin.

The following substances of the British Veterinary Codex 1965 must conform to the requirements of the British Pharmacopoeia 1968.

Part I monographs: Acepromazine Maleate, Hexoestrol, Resulphen, Silver Protein, Mild Silver Protein, Sulphanilamide.

Part III monographs: Liniment of Camphor, Ammoniated, Ointment of Iodine, Non-Staining, Ointment of Iodine with Methyl Salicylate, Non-Staining, Syrup of Chloral, Syrup of Ferrous Phosphate, Compound, Tablets of Acetylsalicylic Acid and Phenacetin, Tablets of Phenacetin.

The following substances of the British Veterinary Codex 1965 must conform to the requirements of the British Pharmacopoeia 1963.

Part I monographs: Acriflavine, Ammonium Bromide, Arsenic Trioxide, Liquid Glucose, Thialbarbitone Sodium.

Part III monographs: Dusting-Powder of Zinc, Compound, Emulsion of Chloroform, Eye Lotion of Boric Acid, Eye Lotion of Zinc Sulphate, Compound, Eye Ointment of Physostigmine, Ointment of Boric Acid, Arsenical Solution, Syrup of Liquid Glucose.

Second-grade Magnesium Sulphate must comply with the requirements of the British Veterinary Codex, but the references to the British Pharmacopoeia no longer apply, and the substance must comply with the requirements for Magnesium Sulphate of the European Pharmacopoeia for Identification, Acidity or alkalinity, Chlorides, Arsenic, Heavy metals, Iron, Loss on drying, and Content of $MgSO_4$; the requirements for Description and Clarity of solution given in the British Veterinary Codex 1965 continue to apply.

When Sodium Sulphate is required for veterinary purposes it must comply with the requirements of the British Veterinary Codex for Veterinary Sodium Sulphate, but the references to the British Pharmacopoeia no longer apply and the substance must comply with the requirements for Sodium Sulphate of the European Pharmacopoeia for Identification, Acidity or alkalinity, Chlorides, Arsenic, Calcium, Heavy metals, Iron, Magnesium, Zinc, Loss on drying, and Content of Na_2SO_4 ; the requirements for Description and Clarity of solution given in the British Veterinary Codex 1965 continue to apply.

European Pharmacopoeia

The following amendments to the European Pharmacopoeia came into effect in the UK on December 1:

Volume I, LIMIT TESTS: CALCIUM, page 107. Change the third line of the first paragraph to—"add a mixture of 1 ml of the solution, prepared as prescribed in the monograph".

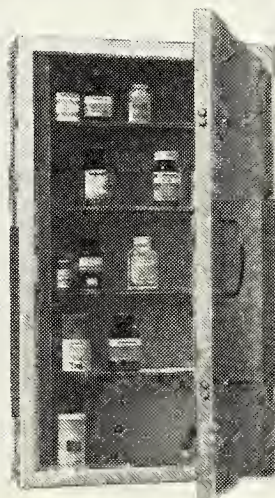
Volume II, CHORDA RESORBILIS ASEPTICA, page 186. Change the fourth paragraph to—"Measure at 30 cm intervals over the whole length of the strand, using an appropriate mechanical method. In the case of strands less than 90 cm in length, measure at 3 points approximately evenly spaced along the strand. The strands are not subjected during measurement to a tension greater than is necessary to keep them straight".

Page 188. Change the second paragraph to—"At least 80 per cent of the strands used in the test have a breaking load not less than that shown in column A of the table for the appropriate gauge. Not more than 20 per cent have a breaking load equal to or less than that prescribed in column A of the table for the gauge immediately below the appropriate gauge and no strand has a breaking load equal to or less than that prescribed in column B of the table for the appropriate gauge".

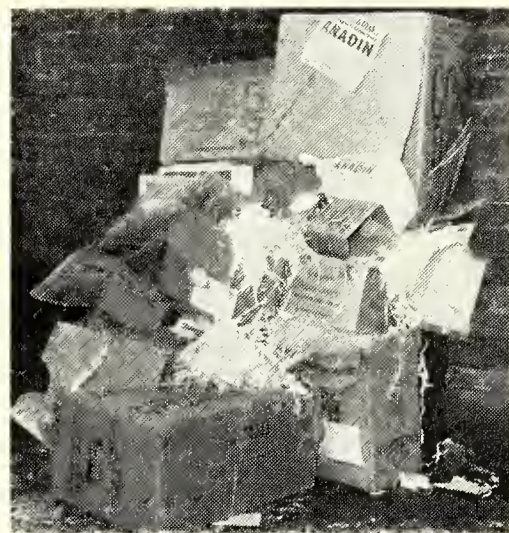
Replace the table of diameters and minimum breaking loads for sterile catgut by the following—

Gauge number	Diameter in mm		Minimum breaking load in kg over simple knot	
	Min.	Max.	A	B
0.1	0.010	0.019	—	—
0.2	0.020	0.029	—	—
0.3	0.030	0.039	0.010	0.005
0.4	0.040	0.049	0.025	0.007
0.5	0.050	0.069	0.040	0.010
0.7	0.070	0.099	0.070	0.025
1	0.100	0.149	0.15	0.04
1.5	0.150	0.199	0.35	0.07
2	0.200	0.249	0.65	0.15
2.5	0.250	0.299	0.85	0.35
3	0.300	0.349	1.25	0.65
3.5	0.350	0.399	1.60	0.85
4	0.400	0.499	2.25	1.25
5	0.500	0.599	3.0	1.6
6	0.600	0.699	3.75	2.25
7	0.700	0.799	4.75	3.0
8	0.800	0.899	6.25	3.75

Two of the drug storage security cabinets described in a feature on such cabinets (C&D, October 21, p 551-53). At left is Tann-Waddell's Universal cabinet the price of which is due to be increased from January 1 to cover the higher cost of steel, and right, the Aardee available for wall or floor-mounting. Both may be ordered direct, or through National Pharmaceutical Union on special terms



if this is your
PROBLEM



now read on



Five Star Features:
Scientific Design
for Smokeless
Destruction of
Paper, Cardboard,
Cartons etc

Full-width Loading
Door 18" x 24".
Big-Big Capacity
over 7 cu. ft.
Double-Lined
Combustion Chamber
Heavy Gauge
All-Steel
Total Weight 2½
cwts. and it's all
Steel

**WE HAVE ARRANGED A SPECIAL
BULK PURCHASE**

**OF THESE
QUALITY INCINERATORS**

**FROM A
WELL-KNOWN MANUFACTURER**

**A LIMITED NUMBER ONLY
AVAILABLE AT THIS SPECIAL
PRICE**

£49-90

PLUS CARRIAGE £3.40

**SEND CHEQUE WITH ORDER NOW
FOR IMMEDIATE DESPATCH**

IMPORTANT Cheques will not be presented to our Bank until proof of despatch (By National Carriers Ltd) has been posted on to the customer.

**WEST MIDLANDS ENTERPRISES
P.O. BOX 3
WHITCHURCH
SALOP**

British Pharmaceutical Students Association, Portsmouth

A future for pharmacists in the industry

The pharmacist still has the edge over other science graduates in the pharmaceutical industry, said Mr S. M. Peretz, managing director of Cyanamid of Great Britain Ltd, at the southern regional conference of the British Pharmaceutical Students' Association in Portsmouth on December 1. Mr Peretz said the advantage came from the pharmacist's ability across a range of disciplines and from the fact that he had a common background with pharmacists in general and hospital practice.

However, salary posed problems for the industry. The newly graduated pharmacist might get £500 a year more in retail and the industry would not pay that because there were many science graduates who might be recruited more cheaply. The young graduate tended to be interested in tomorrow and not what he would be doing in 10 or 15 years. Often in general practice the starting and finishing salaries were too close—in industry there was a fairly clear-cut route to the top.

Mr Peretz added that an attraction of the industry was the "excitement factor"; there were many health problems still to be solved. Three pharmacist colleagues of Mr Peretz described their work in research and development, product registration, and production management, and each stressed the need for the pharmacist to realise he was no more than a "trainee" on entry—it was the person, not the qualification, that was important, and progress was up to the individual.

Mr J. C. Bloomfield, a member of the Pharmaceutical Society's Council, explained the Society's position in relation to EEC proposals that the pharmacist should be the "responsible person" in industry. It did not mean he must be in charge of each stage but that he must take ultimate responsibility for placing a product on the market. The pharmacist could claim this responsibility because he owed allegiance to his profession and "ethical" proceedings could be taken against him.

A short-fall?

There was concern about the possible short-fall of pharmacists in the industry and the Society wished to see a pharmacist in every position that a pharmacist could fill. To establish whether the short-fall was real or apparent, the Council was organising a questionnaire — Mr Bloomfield did not believe that the new pre-registration requirements (involving no more than six months in industry plus six months in hospital or retail) was a cause of the shortage.

Professor P. J. S. Spencer, deputy head of the Welsh school of pharmacy, said that opportunities for women pharmacists could be better. The schools were attract-

ing academically well-qualified women into pharmacy and it was important that the industry should plan careers for them and encourage more to go into research. He felt that a "collective enthusiasm" existed in the industry because all departments were working for a common goal — as a professional person in the industry he had found this particularly rewarding.

During the discussion the question of duplication in research drew the response from Mr Peretz that it was competition between research groups which contributed to progress. "This country has few natural assets except its gift for innovation". The industry was also attacked for not taking up the challenge of pre-registration training, but it was stated that there had been a big change in the past year with co-operation between companies and hospital pharmacy, for example.

When profit margins were criticised, Professor Spencer argued against nationalisation as destroying competition, but he could see the need for a national research body to investigate the "unpopular" diseases.

Ethics of advertising medicines

In the afternoon session the "ethics" of pharmaceutical advertising were discussed. Mrs E. J. M. Leigh, a member of Council, examined advertising by the pharmacist and drew a distinction between success based on trading efficiency and that based on collectively agreed standards. The public interest was best served by encouraging a professional approach to the practice of pharmacy, recognising that responsibility and service transcended turnover and profit. The increasing potency and potential harm of medicines implied restriction of availability and ease of access, of range, variety and quantity of a particular medicine. And these implied restriction in advertising and display intended to encourage impulse buying, and restriction on the freedoms of self-diagnosis and self-medication. However, Mrs Leigh added that this must be judged remembering convenience to the public and doctors.

Mr J. Foster-Firth, advertisement executive, *Chemist & Druggist*, stressed that advertisement could only be fully "ethical" when it gave the truly moral assessment of the product without anything withheld or over-stated, glorified or glamorised. Judged by these standards advertisements in other fields were often not "ethical" — those for cars did not describe them as lethal machines. Mr Foster-Firth thought it right that there should be screening of medicines advertising through the various Acts and voluntary codes but thought it would be wrong to prohibit it provided it was "ethical" in accordance with moral precepts.

Mr A. R. Fuell, secretary of the Pro-

prietary Association of Great Britain said that the industry was first to produce a code of practice (1936) and was still the only one to carry out pre-publication censorship—which extended to all forms of advertising and promotional material. The PAGB pharmacists checked member companies' advertising for compliance with the code, for medical claims, for legality, and for compliance with any product licence.

Answering the charge during the discussion that people can be convinced, by advertising, that they have the symptoms described, Mr Fuell cited the heavy early-winter advertising for colds and influenza products. Yet sales followed closely the numbers of people going to doctors with the symptoms. Advertising was to ensure that when a person sought medicines they would ask for that brand.

There was discussion of whether more warnings about product dangers should be included on OTC medicine packs. Mrs Leigh said the warnings were small and people did not read them, but Mr Fuell commented on a US Council of Family Health television campaign to encourage the public to read the labels. Also criticised were "bribes" given by pharmaceutical companies to doctors and pharmacists, but Mr Fuell thought that any professional man who let his judgment be swayed would be acting "unethically".

Letters

Digoxin tablets

The current issue of the *Lancet*, December 1, includes a letter from Manninen and Korhonen regarding the uniformity of active agent content in single tablets of digoxin. Samples from seven different sources available in Finland, one from Sweden, and one from tablets manufactured by this company were studied and in some instances there was a wide spread of the digoxin content based upon single tablet assay.

Tablets from the two batches of digoxin of Kerfoot's manufacture mentioned in this report were almost two years old and had been supplied by us for clinical evaluation to a consultant in Finland. He reported in November 1972 that "For your digoxin the chemical effect is about the same as the effect of Lanoxin". These batches of tablets were made to comply with the digoxin content requirement of the BP 1968 and when the *monograph* for digoxin tablets was amended in 1973 we, in common with other companies, reviewed our production to ensure that our tablets complied not only with the official standard for uniformity of content, but also with our own standard for dissolution, and the digoxin tablets manufactured by us since that date have complied with those requirements.

It is unfortunate that comparisons were made on tablets of digoxin manufactured by us prior to the current standards of the British Pharmacopoeia.

H. Burlinson
Thomas Kerfoot & Co

See also p790 — Editor

Company News

Liquidity crisis for a major Weston shareholder

London and County Securities Ltd, the banking group for whom a "rescue" plan was mounted this week "to safeguard the interests of its depositors", held a 33 per cent share (the largest single stake) of the equity of Weston Pharmaceuticals Ltd. London and County chairman, Mr Gerald Caplan was also chairman of Weston Pharmaceuticals since February. He has now resigned from the London and County board.

At Weston Pharmaceuticals the directors were not available for comment at the time *C&D* was going to press and there was no information as to Mr Caplan's future connections with L&C's affiliates from that company's headquarters.

Avon Medicals plan big expansion in Midlands

Avon Medicals Ltd a subsidiary of Avon Rubber Co Ltd, plans a £750,000-expansion in the Midlands to meet the increased demand for their specialised products largely associated with the treatment of kidney disease.

While continuing to operate from its present home at Pershore Road, Birmingham, the company has acquired a 13.8-acre site at Redditch New Town. A 100,000 sq ft factory will be built, and when fully commissioned it will employ between 300-400 workers. Work on the building will start in the early summer of 1974, with completion scheduled for the autumn of 1975.

PPL laboratory facilities increased by 30 per cent

To meet the increasing importance the fragrance industry places upon technical and scientific knowledge of its products, the total chemical laboratory area of Proprietary Perfumes Ltd has recently been increased by 30 per cent (6,380 sq ft) following the addition of a third floor to their technical block.

Dr G. Riezebos, technical director, told a Press conference last week that the new floor provided an entirely new laboratory for quality control, an enlarged chemical library, expanded workshop facilities and there was considerable room for expansion.

With the transfer of the library a complete new organic research laboratory had been installed on the second floor. The safe running of organic chemical syntheses overnight has been allowed following the introduction of a new fire and flood proof "night laboratory". The removal of the quality control laboratory to the third floor had meant that the coupled GLC/mass spectroscopy facility could transfer to a larger laboratory on the first floor. Improvements have also been made in the natural products research laboratory, the

quality control (GLC) laboratory, and refrigerated storage of materials. New equipment included additional "spinning-band" columns for high efficiency fractional distillation, digital and computing integrators, automated injection equipment, a recording ultra-violet spectrophotometer and further gas chromatograph.

Asked about future development plans Mr E. A. Griffiths, chairman, said that a new warehouse was planned. On the sales side, the company, in collaboration with their American distributor, Bertrand Frères, were making a drive in the extremely large and competitive US market.

Sturge and Croda put their cases

John & E. Sturge Ltd have sent a circular to their shareholders giving reasons why the board are against a bid made for them by Croda International Ltd.

Sturge forecast group profits of not less than £700,000 for the current year compared with £708,000 last time and say the group is entering a period of strong growth.

They intend to recommend dividends totalling 7.25p (4.725p) gross per share in respect of 1973, ensuring that holders receive a higher income than under the Croda offer, according to Sturge.

"More than half the consideration offered by Croda is in the form of a fixed interest unsecured loan stock, unprotected from the effects of inflation. The value of the Croda offer is equivalent to 85p per Sturge share which provides an exit price-earnings ratio of only 10.9 and is considerably less than the asset backing of the Sturge group," the letter adds.

In a rival letter, Croda chairman Mr F. Wood advises Sturge holders "to compare the value of about 83p which we are offering for each of your shares with

Proprietary Perfumes Ltd's technical laboratory at Ashford, the top storey has recently been completed and occupied giving the company 30 per cent more laboratory facilities. See story this page.

the market price of 65p before our offer, and with the still lower price which you could expect your shares to stand at now if it had not been for our offer."

Fires at new Hoechst centre 'started by animal lovers'

Anti-vivisectionists have claimed to have started two fires at Hoechst Pharmaceuticals' research centre being built at Milton Keynes, Bucks.

The fires were started in corridors at the new building on two separate weekends and damage was mainly due to smoke. The responsibility for the fires has been claimed by the "Band of Mercy" in a letter to a local newspaper, the *Bletchley Gazette*. They threaten to destroy the building "to prevent the torture of our animal brothers and sisters".

Dr Coombes, research director, Hoechst Pharmaceuticals, told *C&D* that the new building is to be used for research, safety-testing of new drugs and the development of diagnostic tests. The company is not involved as the building is still in the hands of the builders. The local police had been informed.

Briefly

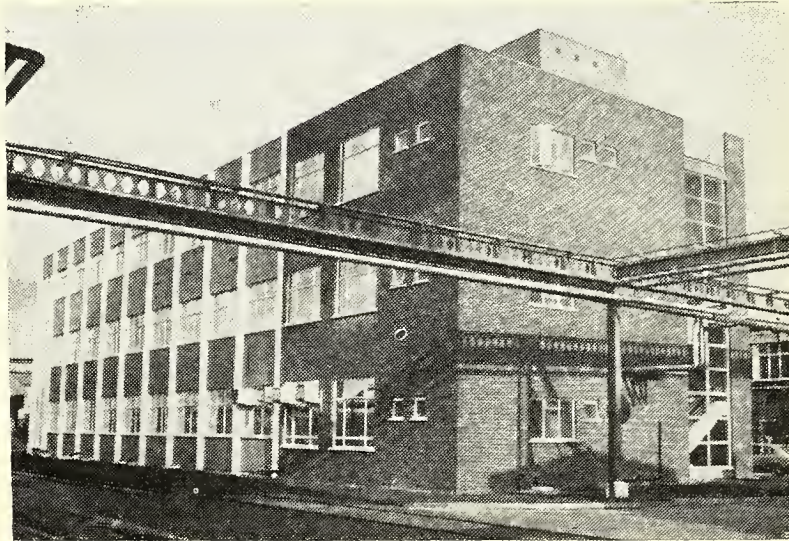
Lundbeck Ltd, have moved to 48 Park Street, Luton, Beds LU1 3HS (tel: Luton 411482).

A team of ten buyers from Taiwan were in London recently with the object of buying chemicals. They met prospective suppliers in the newly established World Trade Centre near Tower Bridge.

Carter-Wallace Ltd, Mr J. B. Glasson has been promoted to the position of south-west regional sales manager; Mr D. J. Mould to south-east regional sales manager and Mr B. A. Barlow to midlands regional sales manager.

Boots Co Ltd declared their intention last week to go ahead with the takeover of the House of Fraser despite the enforced delay in proceedings caused by the Government's decision to refer the deal to the Monopolies Commission.

Calderwood Pharmacy, 32a Calderwood Road, Dublin 9, has been taken over by Mrs Kathleen Dockery, MPSI from the owners, Calderwood Pharmacy Ltd. Mrs Dockery who had managed the pharmacy for some 25 years, will now carry on the practice under her own name and also using the name, Calderwood Pharmacy.



Market News

DRUG SHORTAGES

London, December 5: Crude drugs, like essential oils, are becoming increasingly difficult to obtain. Many of the prices are now nominal; amongst those recently affected are some of the balsams, quillaia for shipment and Curacao aloes on the spot. Nigerian split ginger went up £25 ton for prompt delivery and US vomica by £5. Brazilian menthol was from £0.20 to £0.50 kg dearer according to delivery.

In essential oils bois de rose, eucalyptus and *arvensis* peppermint were all dearer while supplies of petitgrain appear to have been all taken up.

There were no price changes among pharmaceutical chemicals. Hopes of an easing in the supply situation of ethanol received a setback during the week when it became known that chemical production plant of a major British company which had just been expanded at a cost of about £125m had come to a virtual halt because of a labour dispute.

Pharmaceutical chemicals

Acetic acid: 12-ton lots, delivered, per metric ton, BPC glacial from £94; 99.5 per cent technical £87; 80 per cent grades pure £82.50; technical £75.
Adrenaline: (per g) Synthetic 1-kg lots £0.59; 500 g £0.067; acid tartrate, £0.044 and £0.05.
Alcohol: (per proof gal). Synthetic ethanol in 2,500 bulk gal lots—96 per cent, £0.245 and 99.9 per cent, £0.257 in tank wagon; £0.260 and £0.272 in drums for 900-bulk gal; industrial grade 95 per cent £0.172 in bulk and £0.187 in drums.
Aloin: 50-kg lots £9 kg.
Aminacrine hydrochloride: £33.50 kg.
Amylobarbitone: 50-kg lots £4.00 kg; sodium £4.55.
Atropine: (500-kg lots per kg) alkloid and methonitrate £65.20; methylbromide £64.20; sulphate £52.90.
Bacitracin zinc: £0.11 per mu.
Benzocaine: 50-kg lots are £2.68 kg.
Bemegride: BPC £16 kg.
Benzamine lactate: 1.5 kg lots, £95 kg.
Bismuth salts: £ per kg.

	12½-kg	50-kg	250-kg
carbonate	6.68	6.45	6.40
salicylate	5.38	5.15	—
subgallate	5.68	5.45	—
subnitrate	5.88	5.65	5.60

Boric acid: BP grade per metric ton; granular £110; crystals £154; powder £122; extra-fine powder £126 in paper bags, carriage paid. Technical is £24 per 1,000 kg less than BP grades.
Butobarbitone: 50-kg lots £5.65; sodium £6.35.
Butobarbitone: £5.40-kg for 50-kg lots.
Caffeine: Anhydrous and hydrate £2.68 kg.
Calamine: BP £388.00 per 1,000 kg for 250-kg lots.
Cantharidin: £0.75 per 100 g.
Chloral hydrate: 50-kg lots £0.75 kg.
Citric acid: BP granular hydrous per metric ton 50-kg lots £337; 250-kg £325; 1,000-kg £313. Anhydrous £385, £346, £334 respectively. Premium for powder £10.
Colchicine: £0.90 per g.
Cyclobarbitone: £4.40 kg; calcium £4.40.
Dexpantenol: £10 kg; £8.50 kg.
Dienoestrol: 5-kg lots £90.00 kg.
Digoxin: 25-250g lots £2.20 per g.
Dimidium bromide: 5-g lots £3.20 g.
Emetine: 5-kg lots hydrochloride £285 kg; bismuth iodide £200.
Ephedrine: 100 kg lots per kg £14.95; hydrochloride £12.00; sulphate £12.76.
Eucalyptus: Chinese, £6.70 kg, cif, for 80-85, Jan-Ferrous gluconate: £733 metric ton delivered.
Fentichlor: 50-kg lots £1.73 kg.
Ferrous fumarate: £0.50 kg for 50-kg lots.
Ferrous phosphate: In kegs £493.50 metric ton.
Gallic acid: 1,000-kg £1.68 kg.
Hydrogen peroxide: 35 per cent, £149 metric ton.
Iodides: (per kg) Ammonium £4.35 (50-kg) potassium £2.31 (50-kg); £2.29 (250-kg); sodium £2.96 (50-kg).

Iodine: Chilean crude £2.08½ per kg; resublimed £3.07 in 50-kilo lots.
Iron ammonium sulphate: 100-kg £0.20½ kg.
Iron and ammonium citrate: (per metric ton) granules, 50-kg lots £650, 1-ton £620. Scales 50-kg £820; 1-ton £790; green £830.
Lactic acid: £570 metric ton for 50-kg lots.
Mercurochrome: £7.95 per kg.
Mercury salts: Per kg in 50-kg lots; ammoniated powder £5.15; oxides—yellow £5.90 and red £6.10 perchloride £4.30; subchloride £5.45; iodide £5.70 kg for 25-kg.
Mersalyl: Acid £15.75 per kg; sodium £21.50.
Methyl phenobarbitone: £5.55 kg for 25-kg lots.
Parachloro-meta-xylene: 50-kg lots BPC £0.94 kg sulphate £0.88 g.
Pentobarbitone: 50-kg lots £5.20 kg for acid and £5.50 for sodium.
Phenitone: 25-kg lots £4.24 kg.
Pilocarpine: 1-kg lots hydrochloride £96; nitrate £88.
Oleic acid: BP £300 per metric ton delivered.
Oxalic acid: 20-ton lots £155 metric ton.
Paracetamol: 1-metric ton lots £1.22 kg; 5-ton £1.19 kg. For direct compression £1.32 and £1.29 kg respectively.
Paraffins: (minimum 1-ton lots) liquid-BP £0.672 gal; light BPC 1963 £0.586; technical white oil WA23 £0.522; WA21 £0.477; jelly-soft white BP £152 ton; yellow BP £131 all prices now include packaging.
Phenobarbitone: 50-kg lots £4.05 per kg; sodium £4.45.
Piperazine: (Under 50 kg) adipate £0.096 kg; citrate £0.92½; hexahydrate £0.633; phosphate £1.02½.
Pyrogallol acid: Pure 500-kg lots £4.92 kg.
Quinalbarbitone: Sodium and acid £5.70 kg for 25-kg lots.
Sallylamide: (per metric ton) 5-ton lots £770; 1-ton £780, £710.
Stilboestrol: BP in 25-kilo lots £38.00 kg.
Sulphadiazine: 50-kg lots £4.15; micro milled plus £0.15.
Sulphamethizole: BP 50-kg lots £4.57.
Tannic acid: 500-kg fluffy £1.53 kg; powder £1.50.
Tartaric acid: (per metric ton) 50-kg lots £795; 250-kg £790; 1-ton £780.

Crude drugs

Balsams: (kg) Canada: nominal. Copaiba: no offers. Peru: nominal. Tolu: BP £2.60 spot; cif nominal.
Ginger: (ton) Cochin new crop £320, cif, Jan-Feb. Nigerian split £450 spot. Jamaican No. 3 £870; Sierra Leone £460, cif.
Menthol: Brazilian £9.50 kg spot; £9.40, cif. Chinese £10.20, cif.
Nux vomica: £120 metric ton; £95, cif.
Pepper: (ton cif.) Sarawak black £545, white £900.
Pimento: Jamaican £830 long ton, cif, nominal.
Podophyllum: Emodi (metric ton) £425; shipment £400 cif.
Quillaia: Nominal.
Rhubarb: From £0.30 to £1.50 lb.
Saltiron: Mancha superior £88 kg.
Sarsaparilla: Spot £1.15 kg. £1.10 cif.
Seeds: (ton) Anise China star £175; Caraway: Dutch £1,500 metric ton, cif. Celery: Indian £285, cif. Coriander: Moroccan £105, cif. Cumin: £500-£560, cif, as to source. Syrian £500, cif. Dill: Indian, for shipment £185, cif. Fennel: Chinese for shipment £320. Indian £280 cif. Fenugreek: Moroccan forward £160, cif. Mustard: £60-180 spot as to quality.
Turmeric: Madras finger £300 ton spot; £285, cif.

Essential and expressed oils

Almond: Drum lots £0.70 kg.
Anise: Spot traded at £27.00 kg.
Amber: Rectified £0.29 kg spot.
Bay: West Indian short at £10.65 kg.
Bergamot: £11.50-£14 kg as to grade.
Birch tar: Rectified £3.50 kg.
Bois de rose: Shipment £9.00 kg.
Buchu: English distilled £180 kg.
Cade: Spanish £0.90 kg.
Cajuput: £1.50 kg on spot.
Camphor white: Spot £2.20; £2.00, cif.
Cananga: Java £10.00 kg spot.
Caraway: Imported £18.00 kg.
Cardamom: English distilled £95-£120 kg as to source.
Cassia: Chinese not offering.
Cedarwood: Moroccan £1.60 kg.
Celery: English £25 kg; Indian £18.
Cinnamon: Ceylon leaf not offering. Seychelles leaf rectified £3, cif. Bark, BP, £2.20.
Citronella: Ceylon £2.20 kg spot and cif.
Clove: Madagascar leaf £2.40 kg spot and cif. Bud, English distilled £20.00.
Cod-liver: BP in 45-gal lots £40.95 naked; veterinary £38.80.
Coriander: £8.10-£9 kg as to grade.
Cube: English distilled £17 kg.
Dill: From £9.30 kg spot.
Eucalyptus: Chinese, £6.30 kg, cif, for 80-85, Jan-March.
Fennel: Spanish £2.75 kg nominal.
Geranium: (kg) Bourbon £22.00; Conco £14.
Ginger: English distilled £50 kg; Indian £23.
Juniper: Berry £3.50 kg; wood £0.55.
Lavender: French £12.00 kg.
Lemon: Sicilian best grades from £10.00 kg spot.
Lemongrass: £3.20 kg spot, £4.00, c.i.f.
Lime: West Indian £8.50 kg spot.
Mandarin: £7.00 kg.

Nutmeg: (per kg) English distilled from West Indian £15.75; from E. Indian £13.55. Imported £5.70.
Olive: Spanish £720-£730 metric ton, cif. Tunisian £640-£650. Spot £740-£750 duty paid.
Palmarosa: £9.50 kg spot and cif.
Patchouli: Spot £7.00 kg; £6.75, cif.
Pennyroyal: Nominal.
Pepper: English distilled ex black £55.00 kg.
Peppermint: (kg) *Arvensis* Brazilian £4.25 kg all positions; Chinese £7.25; Piperata American from £17.00.
Petitgrain: Unobtainable.
Pimento: Berry £5.30 kg; leaf £4.60.
Pine: (kg) Pumillonis £1.75; sylvestris £0.51.
Rosemary: £5.12 kg.
Sandalwood: Unobtainable.
Sassafras: Not offering.
Spearmint: Chinese no spot; £10.00 cif; American £8.50 — all per kg.
Thyme: Red 65/70% £5.00 kg.

The prices given are those obtained by importers or manufacturers for bulk quantities and do not include value added tax.

Coming events

Monday, December 10

Enfield Branch, Pharmaceutical Society, Postgraduate medical centre, Chase Farm Hospital, at 7.45 pm. Illustrated talk by Mrs J. G. L. Burnby on "The history of pharmacy in Enfield".
London Branch, Guild of Hospital Pharmacists, Auditorium, Wellcome Building, 183 Euston Road, London NW1, at 7.30 pm. Business meeting at 7 pm. Mr R. Sanders (consultant plastic surgeon) on "Plastic surgery".
Nottingham Branch, Pharmaceutical Society, Postgraduate medical centre, at 8 pm. Dr T. Jones (Boots Co Ltd) on "Modern weapons or magic bullets".
Romford Branch, Pharmaceutical Society, MacArthys Ltd, Chesham House, Chesham Close, Romford at 7.30 pm. Ladies' night, cheese and wine plus film and demonstration by Grants of St. James' Ltd.
Southampton Branch, Pharmaceutical Society, room 51, south block, postgraduate centre, Southampton General Hospital, Mrs E. Lucas Smith on "Recent legislation".

Tuesday, December 11

Oxfordshire Branch Pharmaceutical Society, Swan Hotel, Thame, at 8 pm. Christmas social.
Pharmaceutical Group, Luncheon Club, Royal Society of Health, Royal Horseguards Hotel, Whitehall Court, London SW1, at 12.30 pm. Mr A. R. Ritchie (MacArthys Ltd) on "Some aspects of pharmaceutical wholesaling".
Sheffield Branch, Pharmaceutical Society, Royal Victoria Hotel, Sheffield, at 7.30 pm. Mr Payne (Down Bros) on "Surgical appliances—their use in modern practice".
South East Metropolitan Branch, Pharmaceutical Society, Greenwich District Hospital, Working dinner.
West Kent Branch, Pharmaceutical Society, Wellcome Research Laboratories, Park Langley, at 8 pm. Mr Richardson on "The National Trust".

Wednesday, December 12

Brighton and Hove Branch, Pharmaceutical Society, Langfords Hotel, Hove, at 7.30 pm. Working dinner. Guest speaker, Mr A. G. Fishburn (Principle medicines inspector, Department of Health and Social Security).
Fife Branch, Pharmaceutical Society, Station Hotel, Kirkcaldy, at 8 pm. Annual dinner and dance.
Plymouth Branch, Pharmaceutical Society, Moorland Links Hotel. Annual dinner and dance.
Swansea and West Glamorgan Branch, Dragon Hotel, Swansea, at 8 pm. Branch resolutions and photographic competition.
West Metropolitan Branch, Pharmaceutical Society, Great Western Hotel, Paddington Station, London W2, at 7 pm. Mr T. McLachlan (public analyst for Westminster, Hammersmith, and the Pharmaceutical Society) on "The work of the public analyst".

Thursday, December 13

Durham County Branch, Pharmaceutical Society, Redhills Hotel, Nevilles Cross, Durham, at 8 pm. Mr B. Sharp on "Pharmacy in Nigeria".
Leeds Branch, Pharmaceutical Society, Wellesley Hotel, at 8 pm. Mr J. G. Roberts on "Involvement".
Swindon Branch, Pharmaceutical Society, Swindon Town Football Club, County Ground, Swindon, at 8 pm. Film "Standard drugs for the seventies".

Friday, December 14

Bristol Branch, Pharmaceutical Society, Dyrham Lodge, 16 Clifton Park, Bristol, at 7.30 pm. Wine and cheese party.

INFLUENZA and 'COMMON COLD' TABLETS
(homoeopathic formula)Pack of 5 bottles wholesale £1.15 inc. VAT
Retail 48p per bottlefrom **A. NELSON AND COMPANY LIMITED,**
73 DUKE STREET, LONDON, W1M 6BY
Telephones 01-629 3118/3119/3205Automatic telephone answering service
available when the Pharmacy is closed.**SILESCOL TUBING****TRANSLUCENT SILICONE RUBBER**

Elastic at temperatures up to 180/200°C

Will not deteriorate in storage

**ESCO (RUBBER) LTD**

14-16 GREAT PORTLAND ST., LONDON W1N 5AB

Classified Advertisements

Post to Classified Advertisements, Chemist & Drug-
gist, 25 New Street Square, London, EC4A 3JA.

Telephone: 01-353 3212.

Display £6.00 per single column inch, minimum 1 inch
(1" × 1½"). ¼ page (4½" × 3½") £50.00. ½ page
(4½" × 7" or 10" × 3½") £85.00. Whole page (10"
× 7") £155.00.**Lineage** £0.50 per line, minimum 5 lines @ £2.50.**Box Numbers** £0.25 extra.**Series Discounts** 5% on 3 insertions or over. 10%
on 7 insertions or over. 15% on 13 insertions or over.**Copy date** 4 pm Tuesday prior to publication date.
Advertisements should be prepaid.

Hospital appointments

Kings

COLLEGE HOSPITAL GROUPFollowing re-organisation to the Noel Hall Structure
we have vacancies for the following:

STAFF PHARMACIST

Quality control to be based at King's College Hospital.
This post would provide a young graduate with
experience in setting up a new quality control
department.

PHARMACIST

(Noel Hall)
for duties at King's College Hospital.

PRE. REG. GRADUATE

Vacancy for a graduate wanting six months pre.
registration experience from January.

P/T PHARMACIST

for Belgrave Children's Hospital. Sessional. Hours
by arrangement.Further information from Miss Hodges, Group Chief
Pharmacist Ext. 2272. Application form from
Personnel Department, King's College Hospital,
Denmark Hill, London SE5 9RS. Tel: 01-274 6222
Ext. 2724/8.

Situations vacant

OPERATIONS MANAGER

Around £5,000+ per annum

Our client, a London based wholesale chemist, re-
quires an Operations Manager. The Company, which is
privately owned, has a turnover exceeding £1M. and
has recently moved into new premises as the next
stage of its planned expansion programme.The man appointed will be responsible directly to
the managing director and some experience of whole-
sale pharmacy is most desirable. We are looking first
and foremost for a good organiser who can ensure that
a high level of customer service is achieved while at
the same time exercising adequate control over operat-
ing costs. He will have full control over the warehouse
and distribution functions. Age is not critical but we
would expect the right experience and outlook to be
contained in a man aged between 28 and 40.A starting salary in the region of £5,000 is en-
visaged which could be higher in exceptional circum-
stances, with negotiable fringe benefits. The right man
could hope to be appointed to the Board within the
next twelve months.Please send brief details, in complete confidence,
to:**DREW, McCONKEY & ASSOCIATES LIMITED**17, Marlfield Road,
Hale Barns, Cheshire.

CHEMIST OR PHARMACIST WITH INDUSTRIAL EXPERIENCE

required for quality control, supervision of manufacture. Pharma-
ceutical and veterinary products. Salary negotiable.Apply in writing stating qualifications and experience to The
Managing Director, W. J. Rendell, Ltd., Ickleford Manor, Hitchin,
Hertfordshire.

Classified advertisements

Trade marks

The Trade Marks set out below were assigned on the 26th January 1973 by BRISTOL-MYERS COMPANY of 345 Park Avenue, New York, State of New York 10022, United States of America to INTERVET LABORATORIES LIMITED of Plantation House, 31-35 Fenchurch Street, London, EC3M 3NN: **WITHOUT THE GOODWILL OF THE BUSINESS IN WHICH THEY WERE THEN IN USE.**

REGISTERED No. TRADE MARK GOODS

931358	ANIVIT-PLUS	Veterinary preparations containing vitamins and for use by injection.
986124	ASPAMOD	Veterinary preparations and substances.

The Trade Marks set out below were assigned on 29th December 1972 by Stevenson, Turner and Boyce Limited of Stamford House, Langley, Buckinghamshire to Intervet Laboratories Ltd of Section D 6th Floor, Plantation House, 31-35 Fenchurch Street, London EC3M 3NN. **WITHOUT THE GOODWILL OF THE BUSINESS IN WHICH THEY WERE THEN IN USE.**

No.	Mark	Goods
836913	DYTOSEL	Pharmaceutical preparations and substances
837934	VONAMYCIN	Antibiotics and antibiotic preparations all included in Class 5
838213	ANIMYCETIN	" " " "
841477	MILIMYCIN	" " " "

The Trade Marks set out below were assigned on the 20th July 1973 by Osborne, Garrett, Nagale Limited of Edgware Road, Colindale, London NW9 to Ogee Limited of Wessex Road Bourne End, Buckinghamshire: **WITHOUT THE GOODWILL OF THE BUSINESS IN WHICH THEY WERE THEN IN USE.**

Registered No. 208893 — Trade Mark OGEE
All goods included in Class 47.

Registered No. 752682 — Trade Mark Plastiset
Perfumes, toilet preparations (not medicated), cosmetic preparations, dentifrices, depilatory preparations, toilet articles (not included in other classes), sachets for use in waving the hair, soaps and essential oils.

Registered No. B923899 — Trade Mark Elegan
Perfumes, non-medicated toilet preparations, cosmetic preparations, dentifrices, depilatory preparations, toilet articles included in Class 3, sachets for use in waving the hair, shampoos, soaps and essential oils.

**Our address
for Box No.
replies is**

**Chemist & Druggist
25 New Street Square
London, EC4A 3JA
Tel: 01-353 3212**

Miscellaneous

FASHION JEWELLERY — GENTLEMEN you can't sell perfume in a jam jar, it has to be elegantly presented. The same principle applies to FASHION JEWELLERY, our elegant displays all marked with retail prices inc. V.A.T. can be working for you within minutes of delivery and be a credit to your shop. Our huge range ensures lucrative profits through fast sales. Delivery on the spot no waiting. Contact: R. F. Vernon & Co., 36 Poman Road, Birstall, Leicestershire. Tel: 675327 S.T.D., Code 0533. NOW

VAT CALCULATIONS? TAX SUMS?

Let **TOLLEY'S TAX TABLES** help you.

The 1973/74 edition includes 30% income tax, corporation tax at 15% and 40% Estate Duty. Sur-Tax, and VAT (1/11 and 110%). Twelve easy-to-read tables for only 50p. Send cheque/P.O. with order to **TOLLEY PUBLISHING CO.** Dept. CD, 44a High St., Croydon CR9 1UU.

SHOPKEEPERS

An extra £70.00 per week net profit could be yours. Reduce or move your stock to one half of the shop, end install a Village Mini-Laundry.

Designed to fit easily and quickly into a small space. . . . No worries with stocks, staff, debts —all taking in CASH. Have two strings to your bow—a perfect 'money spinner' for ANYWHERE without a launderette.

For further details write or phone:—

**The Village Laundry Ltd.,
White Lion House,
White Lion Square,
Hatfield, Herts.**

Telephone:—Hatfield 67314

FASHION JEWELLERY

**Jodez (Manchester) Ltd.
34 Shudehill, Manchester M4 1EY
Tel: 061-832 6564**

Largest and most exclusive selection of Necklets, Brooches, Chainbelts, Dress Rings, Earrings (all types). Hair-Ornaments, etc.

Wanted

WE WILL PURCHASE for cash a complete stock of a redundant line, including finished or partly finished goods packaging, raw materials, etc. No quantity too large. Our representative will call anywhere. Write or telephone Lawrence Edwards & Co. Ltd., 6/7 Wellington Close, Ledbury Road, London, W.11. Tel: Park 3137-8

URGENTLY REQUIRED, all items connected with old-fashioned Pharmacies—Runs of drug drawers, shop rounds, jars, etc. Complete interiors of pharmacies bought. Telephone Ashted (Surrey) 72319 or write Robin Wheeler, 'Mephehurst', Park Lane, Ashted, Surrey.

**Please mention
C & D
when replying
to advertisements**

Shopfitting

**Low Cost
Unit
Shopfronts
600 Designs**

**Take
36
Months
To Pay**

- * In Anodised Aluminium
- * Built in Illuminated Signs
- * Available from stock
- * Installed in 2 Days on most sites

UNIT SHOPFRONTS LTD

LVP House, Park Royal Road,
London N.W.10. 7LF.

PHONE: 01-965-9712

SHOPFRONTS and Interior fittings by Chemist Specialists. **WARWICK SHOPFITTING**, 20 Rudd Street, London, SE18 6RS. Tel: 01-854 0343.

INTERPLAN SYSTEM 80 modular shopfittings, attractive units at attractive prices, complete installations NPU recommended. Brochure from **OLNEY BROS. LTD., SHOP-FITTERS**, NORTHBRIDGE ROAD, BERKHAMSTED, HERTS. Tel. 5417-9.

For Sale

MANLY MAN'S BELT. Nationally advertised "obtainable from chemists", £3.04. Full trade terms. Order by waist measurement from Manly Co., 23 Freshwater Parade, Bishopsric, Horsham, Sussex. Telephone: Horsham 5426.

Chemical Industry Handbook 1973-4

A guide to the chemical process industry in the United Kingdom and Europe

With the entry of the United Kingdom into the Common Market the 1973-4 edition of THE CHEMICAL INDUSTRY HANDBOOK has been expanded to cover most of the larger European companies. The sixth edition follows the same general pattern of previous ones. It attempts to put between two covers all available facts and figures relating to the U.K. (and in this edition European) Chemical Process Industry. Statistics have been updated and further new ones included while the number of companies analysed has again been increased.

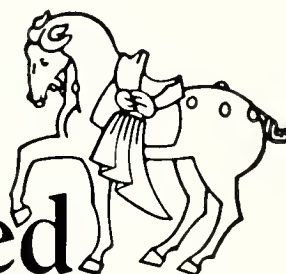
A4 size 400 pages

**Diagrams tables and growth charts
£22.00**

Ernest Benn Limited Sovereign Way Tonbridge Kent

Ernest Benn Limited

CONTENTS: The Chemical Industry and the World Scene; External Trade; Company Profits and Share Price Performance; The Paint Industry; The Oil Industry; The Plastics Industry; Man-Made Fibres; Pharmaceuticals; The Fertiliser Industry; Miscellaneous Sectors of the Chemical Industry; Analysis of Companies; Who Owns Whom; *Financial Times* Actuaries Chemical Share Price Index—Chemicals; Guide to Prices of Chemicals; A.B.C. of Chemicals; Glossary.



The Triangle Trust helps people of the Pharmaceutical Industry

The Triangle Trust 1949 Fund is an independent charitable trust administered by a Board of Trustees. Its primary aim is the relief of hardship or distress in the case of people and their dependents employed, or formerly employed in the pharmaceutical industry in Great Britain and the British Commonwealth. Such relief may include assistance with the educational expenses of children.

The Trustees are also prepared to consider applications for financial assistance, beyond the scope of an employer's responsibilities, with education or training in general or special subjects, including music and the arts.

For additional information, or to apply for assistance, write to:

The Secretary, Dept CD
The Triangle Trust 1949 Fund
Clarges House, 6-12, Clarges Street
London W1Y 8DH

CORRECTION

HILL'S BALSAM PASTILLES

*WE REGRET THAT THE
TRADE PRICE GIVEN IN LAST
WEEK'S ANNOUNCEMENT
WAS INCORRECT*

The correct price is as follows

TRADE PRICE £0.1382 PER
TIN
(EXCL V.A.T.)

RETAIL PRICE 21p PER
TIN
(INCL V.A.T.)

**HILL'S PHARMACEUTICALS
LTD, NELSON.**

Introducing new Bambi.

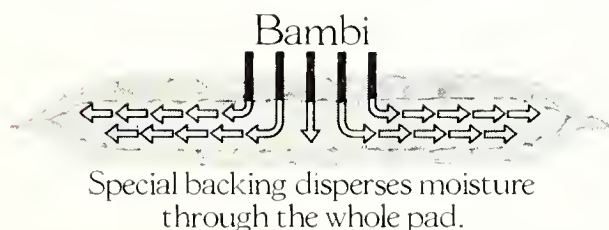
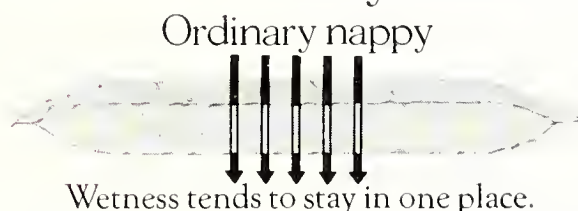
The new improved Golden Babe disposable nappy from Lilia-White.

Golden Babe Bambi pads are a new concept in disposable nappies. They have their own built-in waterproof backing.

This disperses the moisture evenly through the nappy instead of allowing it to collect in a pool as it can do with ordinary disposables.

They lessen the chance of nappy rash

and they're much more comfortable to wear.



We'll be advertising new Bambi pads in all the high circulation women's magazines plus the specialist mother and baby press.

The campaign starts in November with full colour spaces and hard hitting ads.

We'll be running a big money off promotion. Over 100,000 mothers will each receive a 16p Golden Babe nappy voucher redeemable through your outlet.

